LIBERO C PDF Logger & Indicator

Operation Manual

ELPRO-BUCHS AG

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  - Accessories excluding probes and third-party products
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  - modified
  - replaced by an incorrect product
  - damaged as the result of an accident or operational or handling conditions that do not comply with the specifications.
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- The software products of ELPRO-BUCHS AG are subject to internal quality requirements and are validated regularly at the works. In the event of program errors, circumvention of the error is regarded as constituting its elimination.
- Software manuals do not contain either instructions on basic operation of a computer or the basic functions of the Windows® operating system. For information on the operation of the computer or the operating system please refer to the applicable computer manuals.

Data loggers, sensors and accessories

- ELPRO-BUCHS AG applies the highest quality standards during production of the data loggers and their accessories as well as a certified quality management system in compliance with ISO 9001:2008.
- For information on operation of the data loggers and their accessories please refer to the respective product documentation.
- During the installation of data loggers, probes and accessories, compliance with the locally valid installation regulations is mandatory.
- When used in potentially explosive atmospheres, the zone category and the application and safety instructions of ELPRO-BUCHS AG must be complied with.
- In the event of a guarantee claim, customers receive a repair cost estimate from ELPRO-BUCHS AG to obtain the corresponding consent before starting work.
- The customer will bear the transport costs incurred for any repairs carried out by ELPRO-BUCHS AG. The DAP (value added tax) is borne by ELPRO-BUCHS AG.
- ELPRO-BUCHS AG reserves the right to invoice the customer for costs incurred for repair/part replacement.
- After repair work the product is returned to the purchaser, who will be charged with the return shipping costs (FOB shipping point).

Trademarks

All stated company and product names and their trademarks are the protected property of the respective owner.

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Symbols and designations

Information

IMPORTANT INFORMATION AND WARNING

⇨ Reference to supplementary section [xxx / yyy / zzz; e.g. 3.4.4 *Time settings* / Summer time / start date] or document

LIBERO Cx	Name of the data logger or indicator.
PDF report	Logged transport information is created as ****.pdf file.
liberoCONFIG	Program for the configuration of a LIBERO
LIBERO SmartStart	Application for simple and reliable assignment of configuration profiles on a LIBERO.

In the interest of our customers we reserve the right to make any changes resulting from technical advancement. For this reason diagrams, descriptions and the extent of delivery are subject to change without any notice!

This manual is valid from software release 2013.6.1.0

Introduction

LIBERO Cx is used for monitoring the transport of temperature sensitive goods. Temperature limits, the mean kinetic temperature (MKT) and the logging time can be set as alarm criteria and monitored during transport. Upon arrival the LIBERO Cx is connected to any USB port and automatically generates a PDF report with the transport logging results. No additional software is required to read out the LIBERO Cx. The PDF report is created in PDF/A format and is compliant with the ISO 19005-1 Document Management Standard which permits long-term archiving of the PDF report without further conversion.

The LIBERO Cx settings are made with the liberoCONFIG configuration software. During configuration not only the device settings such as the logging interval, alarm limits and device behavior can be set, but also the text information and the content of the PDF report can be specified. The selected settings can be saved as a configuration profile and easily transferred to other LIBERO Cx.

If there are several LIBERO Cx that are to be configured with the same setting, previously created configuration profiles can be transferred directly with the LIBERO SmartStart application. Transfer is absolutely reliable and safe as no device settings are accessible during this process. LIBERO SmartStart is used to load the correct configuration profile onto the LIBERO at the start of transport quickly and reliably. When assigning a profile with the LIBERO SmartStart, previously defined fields can be filled with shipment-related information such as the transport number, order number, carrier etc. This permits creation of shipment-related PDF reports with all details of the transport.

The data logged with the LIBERO Cx can additionally be analyzed, evaluated and commented with the elproVIEWER software.

In addition to the LIBERO Cx for transport monitoring, the LIBERO Tx device family provides a wide selection of LIBERO data loggers for the widest range of applications (multiple usage, dry ice and cryo-monitoring, temperature and moisture logging etc.).

A LIBERO PDF REPORT IS A PDF/A - ISO STANDARD FILE
ONLY OPEN THE FILE WITH A PDF READER

Always save the PDF file from the LIBERO Cx directly and without opening it or send it as an e-mail attachment. Opening and saving of the PDF file with a PDF editor can make additionally embedded data unusable for subsequent processing with elproVIEWER, elproASSISTANT or liberoMANAGER. The integrity of a PDF report can be checked with the "Check PDF file integrity" function in liberoCONFIG.

Common LIBERO Cx

- Single use
- Logging of 8800 values
- Interval of 1 to 60 minutes
- No special device driver required
- Fully user configurable

Types

LIBERO CS

PDF logger

- Multi alarm zones, time and MKT alarm
  Up to four high alarm zones (H) can be defined
  Up to three low alarm zones (L) can be defined.
  PDF report with graph

LIBERO CB

PDF logger

- Single alarm, time and MKT alarm
  Only one high alarm zone (H) and one low alarm zone (L) can be defined
  PDF report with graph

LIBERO CI

PDF indicator

- Multi alarm zones, time and MKT alarm
  Up to four high alarm zones (H) can be defined
  Up to three low alarm zones (L) can be defined.
  PDF report without graph

THE PDF REPORT OF A LIBERO CI DOES NOT CONTAIN A GRAPH OF THE TEMPERATURE CURVE!

1 LIBERO Cx safety information

1.1 Influence of temperature

⇨ For the application range: www.elpro.com.

- There is danger of a gas explosion when the lithium battery heats up to temperatures exceeding 100 °C.
- Do not throw LIBEROs into fire, the battery could explode.

1.2 Battery

Lithium battery

Material Safety Data Sheet (form according to EEC Directive 93/112/EC) and shipment recommendation are available from ELPRO-BUCHS AG.

- Lithium, manganese dioxide
- Non-rechargeable button cell battery
- No shipping declaration necessary

1.3 Disposal

WEEE

Europe

This product has to be disposed of according to WEEE (Waste Electrical and Electronic Equipment, 2002/96/EC)!

U.S.A.

Find a drop-off center for electronic waste in your area to dispose of the LIBERO. In any case it is recommended to contact the local EPA (U.S. Environmental Protection Agency) office. http://www.epa.gov

International

If possible, dispose of the LIBERO in an official drop-off center for electronic waste in your area. Many countries enforce electronic recycling.

http://en.wikipedia.org/wiki/Electronic_waste.

1.4 Exceptional environmental conditions

Infrared radiation
Microwaves
X-Ray

Pay attention to the following if you use the LIBERO Cx under exceptional environmental conditions:

- IR radiation (heat) and superheated steam can result in deformation of the case.
- There is a risk that the battery may explode if the logger is used in conjunction with microwaves.
- X-rays can harm the LIBERO. The specifications are on file at ELPRO-BUCHS AG.

⇨ 3.4.5.1 *Status information and error messages in the PDF report*

CE

CE This product must be certified with CE

The manufacturer warrants this product is compliant to the following guidelines EN 61000-6-2:2006 and EN 61000-6-4:2006.

EMI

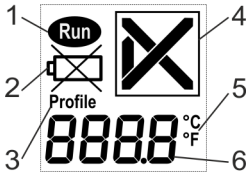
LIBERO Cx PDF loggers and indicators meet the requirements regarding electromagnetic interference (EMI) for portable electronic devices for use on airplanes in accordance with the definition in the Advisory Circular 91-21.1B of the Federal Aviation Administration (FAA,) and were tested in accordance with RTCA/DO-160G Environmental Conditions and Test Procedures for Airborne Equipment.

2 Quick start

Case elements

1. Protection cap
2. USB connector
3. Display; a non-configured LIBERO Cx displays "ConF".
4. Start/Stop button
5. Exp:XX/YYYY
   Expiry date: The LIBERO Cx can no longer be used after this date.
   Device ID: 7100 0000 000

Display



1. Run
   Flashes when the LIBERO Cx is active; data logging or delay
2. Battery exhausted
   Signals a low battery charge. Access to the data through the USB ports is still possible.
3. Profile
   The displayed value corresponds with the Profile-ID

   ⇨ see 3.4.6 *Handling Options - Profile-ID*

4. Alarm indicator
   The alarm indicator shows whether everything was within limits to date or if limits were violated.
5. Temperature unit
6. Measured value or information

Start/Stop button

- A configured LIBERO Cx is started by pressing and holding the Start/Stop button for at least three seconds.

  ⇨ 3.4.6 *Handling Options*
- The Profile-ID can be displayed by briefly pressing the Start/Stop button when the LIBERO Cx is configured or stopped.
- A running LIBERO Cx is stopped by pressing and holding the Start/Stop button for at least three seconds.
- The Start/Stop button can be deactivated.

  ⇨ 3.4.6 *Handling Options*

3 Configuration of a LIBERO Cx

3.1 Introduction to liberoCONFIG

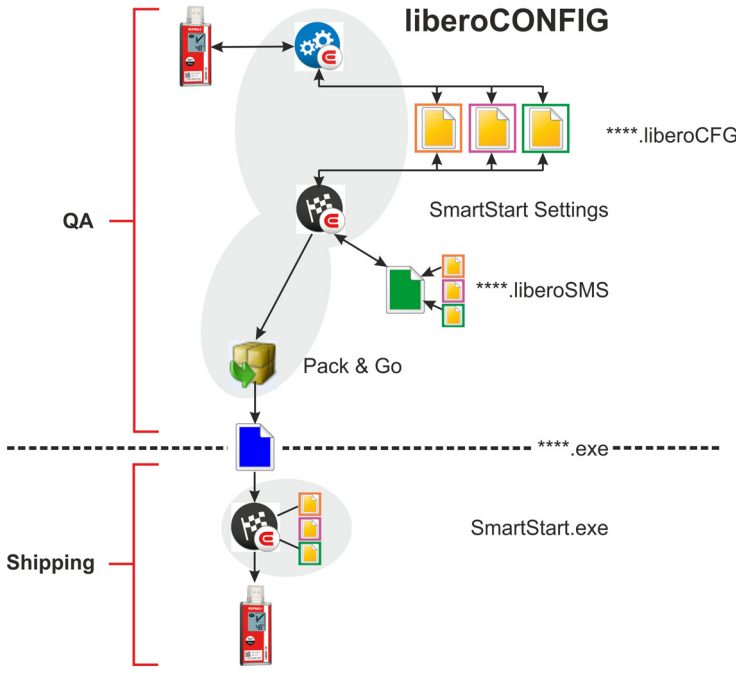
liberoCONFIG is the software to configure LIBERO PDF loggers and indicators. The necessary configuration parameters of the LIBEROs can be set and additionally saved in a configuration profile. The profile contains all information regarding the monitored transport and the information that is documented in the PDF report. It is also possible to use SmartStart Pack & Go to quickly and safely assign configuration profiles to a large number of LIBEROs.

In this operation manual the designation LIBERO Cx stands for the types LIBERO CS, LIBERO CB and LIBERO CI.

Details on the current models and their data sheets are available at www.elpro.com

3.1.1 Configuration file till SmartStart Pack & Go exe file

The configuration of an individual LIBERO Cx is carried out with liberoCONFIG. This work is simplified considerably if configurations are repeated frequently by the use of SmartStart and Pack & Go.



Configuration variants

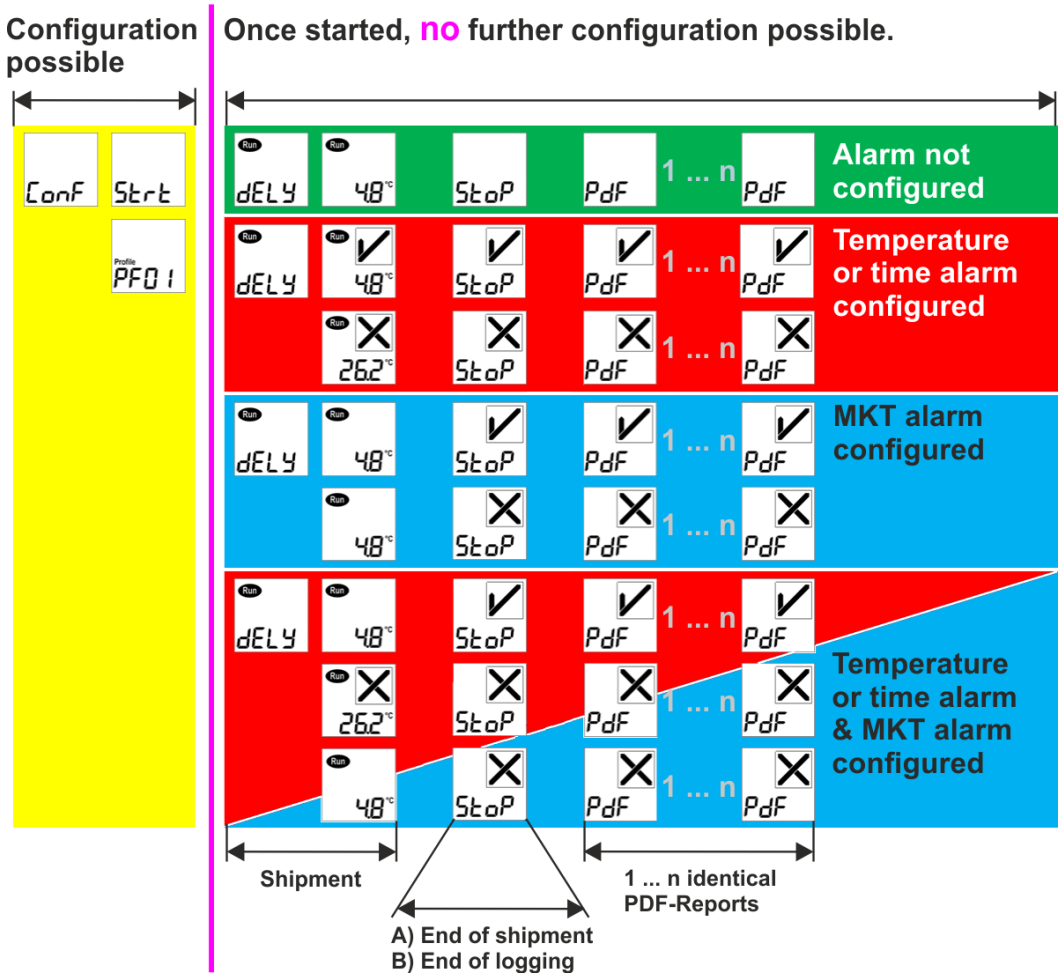
SmartStart Pack & Go exe file with a LIBERO Cx can be used on any PC without installation or a special driver.

3.1.2 System requirements

- Windows XP, 7 or 8
- CPU 1.5GHz
- Memory: 512 MB RAM
- Free hard disk space: 100 MB
- Monitor: 800 x 600 Pixel

Information on the latest functions is given in the "ReadMe" file.

3.2 Status information LIBERO Cx display



LIBERO Cx Display

A) End of transport
B) End of logging

If the end of transport is marked with the Start/Stop button, the LIBERO Cx logs the data until connection to a USB port. This data does not have any influence on the status information in the PDF report, but can be evaluated with elproVIEWER.

If the end of transport is marked by connection to a USB port, no more data is logged.

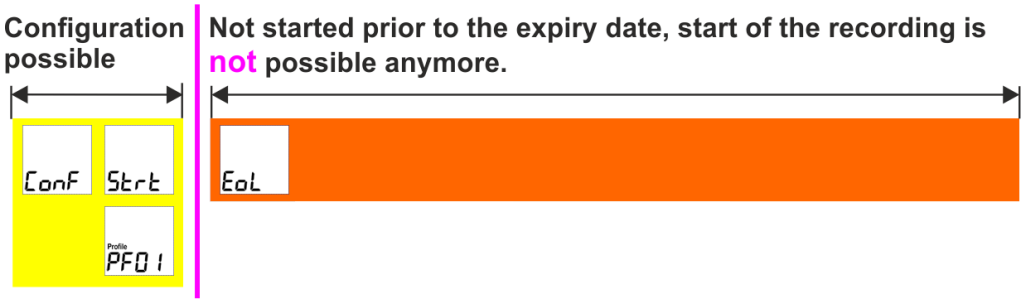
Depiction of an alarm or error message

Alarm indicator

⇨ 3.3 *Start of liberoCONFIG*

⇨ 3.4.3 *Alarm conditions*

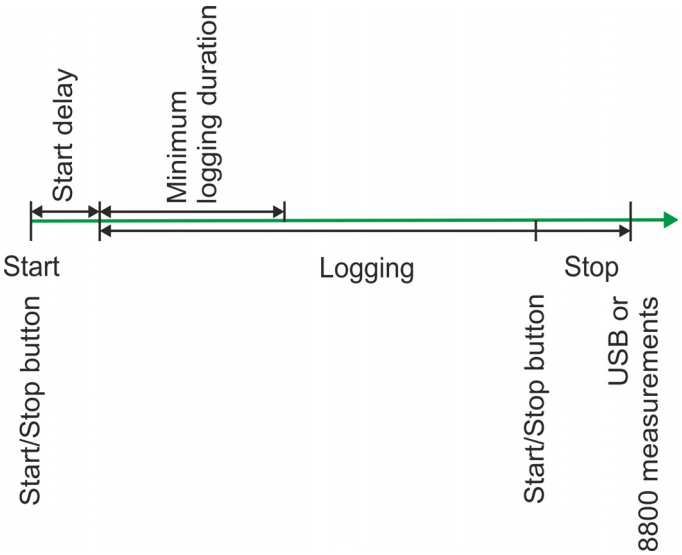
3.2.1 EoL - End of Life



LIBERO Cx Display "EoL"

If the LIBERO Cx is started before the expiry date, it continues logging until it is stopped, the battery is exhausted or the memory is full. Logged data is available even the battery is exhausted.

3.2.2 Schedule: Start to stop of logging



LIBERO Cx - Start/stop time

⇨ 3.4.2 *Logging* - Start options

⇨ 3.4.6 *Handling Options* - Stop options

3.2.3 Error codes

In the event of device errors, an alarm indicator and the error code are displayed. The error is documented in the PDF report. In such a case please contact the ELPRO Customer Service.

⇨ 3.4.5.1 *Status information and error messages in the PDF report*

Exxx

- Logging status is not changed
- PDF report evaluation is possible
- Displayed error code remains visible

E210

- Configuration data are invalid
- Start is not possible
- Error is deleted after a valid configuration

3.2.4 Temperature alarm

HI: Ambient temperature is higher than +70 °C

Lo: Ambient temperature is lower than -20 °C

When used outside the measuring range an alarm indicator is always displayed. The error is documented in the PDF report.

⇨ 3.4.5.1 *Status information and error messages in the PDF report*

3.2.5 Configuration mode

The configuration mode is used to set or change all logging features (profile). liberoCONFIG is used for these settings.

Configuration is only possible if "ConF", "Strt" or the Profile-ID is displayed.

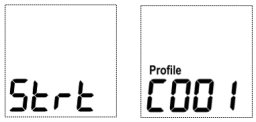
⇨ 3.4.2 *Logging*

⇨ 3.4.3 *Alarm conditions*

Display: New LIBERO Cx

Unconfigured LIBERO Cx show "ConF" on the display.

Display: Configured LIBERO Cx



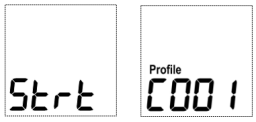
Either "Strt" or the Profile-ID is shown on a configured but not started LIBERO Cx.

Start configuration

As soon as the LIBERO Cx is connected to the USB port, it switches to configuration mode.

⇨ Continue with 3.4 *Configuring the LIBERO Cx*

Configuration completed



After configuration remove the LIBERO Cx from the USB port.

Either "Strt" or the Profile-ID is shown on the display.

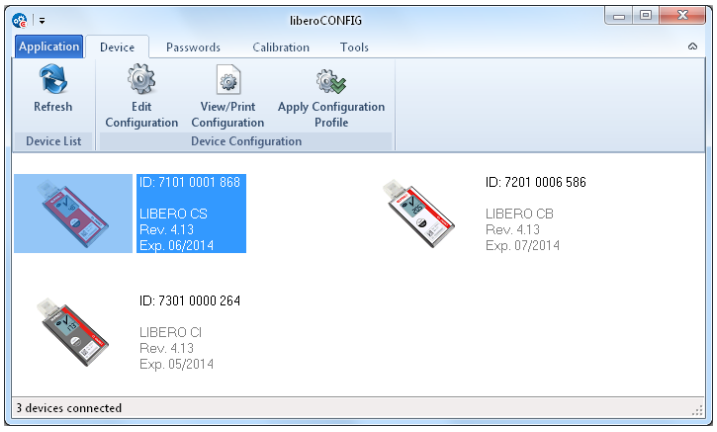
Communication error

THE FOLLOWING CASES COULD CAUSE COMMUNICATION PROBLEMS:

- **Bad USB extension cable**
- **Passive USB hub. Please use an active USB hub or connect the LIBERO Cx directly to the PC.**

3.3 Start of liberoCONFIG

In this view, all available LIBEROs are visible.



Start window of liberoCONFIG with 3 LIBERO Cx

The following information is shown

- LIBERO ID
- Type
- Firmware Version
- Expiry date

3

Single / multiple device selection

Except "Edit configuration", all functions described in the following chapters can be applied to multiple *LIBERO Cx* selected at the same time.

A LIBERO CX IN STOP MODE DOES NOT APPEAR IN THE START WINDOW!

Application

Refresh

Refreshes the start window of liberoCONFIG

Edit configuration

⇨ 3 *Configuration of a LIBERO Cx*

LIBERO SmartStart

⇨ 3.8 *LIBERO SmartStart settings*

Check the PDF file integrity

⇨ 3.7 *Check PDF Report Integrity*

First-time use

Before using liberoCONFIG for the first time make the following settings:

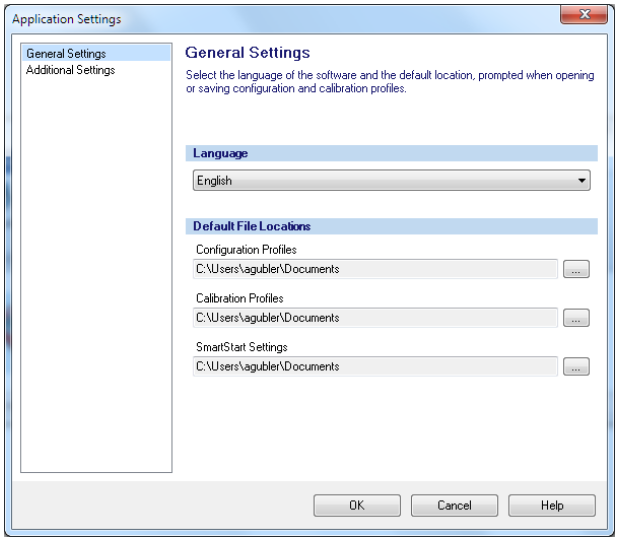
- Language
- Default file locations
- Password length
- Specify the paper format for the reports

⇨ 3.3.1 *Options*

Shows the information about the current program version and license number.

3.3.1 Options

In "Options" various general program settings can be made.



Options - General settings

Language

- German
- English
- Spanish
- French
- Italian
- Dutch

Default File Locations

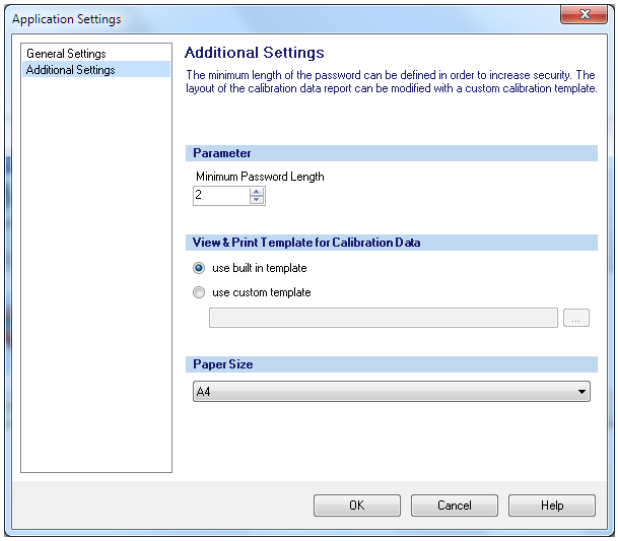
3 different file locations may be defined or selected:

⇨ For the configuration profiles see 3.4 *Configuring the LIBERO Cx*

⇨ Calibration Profiles

It is not possible to assign a calibration profile to a LIBERO Cx, see 3.6 *Calibration - View/Print*.

⇨ 3.8 *LIBERO SmartStart settings*



Options - Additional Settings

Parameters Data entry field used for the definition of the minimum password length.

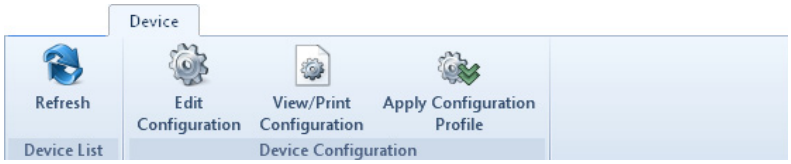
View & Print Template for Calibration Data

- Not available for LIBERO Cx.
- Settings only apply for LIBERO Tx.

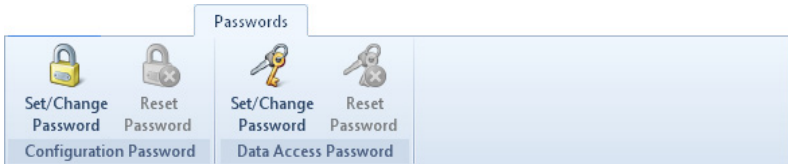
Paper Size You may choose between A4 and Letter.

3.3.2 Menus

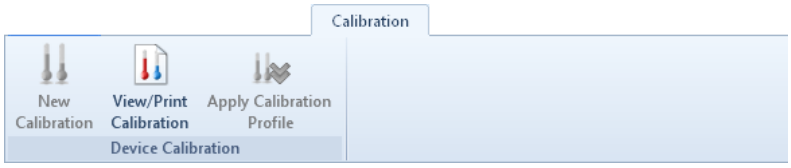
Chapter



3.4 *Configuring the LIBERO Cx*



3.5 *Passwords*



3.6 *Calibration - View/Print*

3.7 *Check PDF Report Integrity*

3.8 *LIBERO SmartStart settings*

3

3.3.3 Buttons

The following buttons are used within liberoCONFIG:

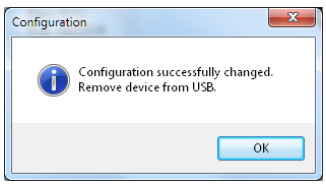
- Load Profile
  Used to open a formerly saved profile for setting-up LIBERO Cx.

- Save Profile
  Used to save a new profile in a file

- Apply
  The currently displayed configuration settings are transferred to the LIBERO Cx.

3.3.4 Confirmation

All successful actions are confirmed, e.g. configuration.



3.3.5 Configuration Profiles

A configuration profile represents all set-up information used by the selected LIBERO for a monitoring task and defined by liberoCONFIG such as:

- Description of the PDF report
- Logging interval
- Alarm settings
- Format settings
- Handling options

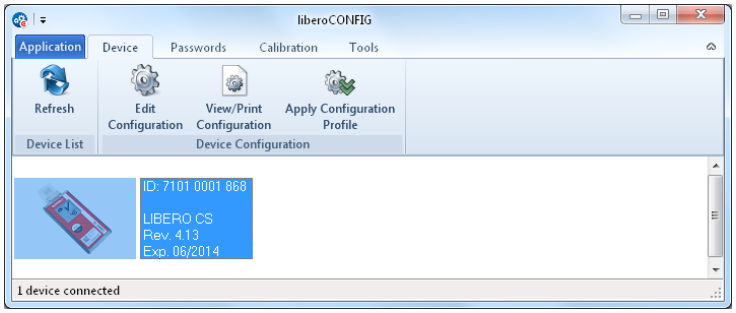
Configuration profiles saved as "***. LiberoCFG" files can either be applied to multiple LIBERO Cx or saved for later use.

Profile Checksum

The checksum is used to prove the validity of the profile and as reference value for a configuration check. It is displayed in the "Configuration" window and is documented in the section "LIBERO Configuration" of the PDF report.

3.4 Configuring the LIBERO Cx

The following chapter represents a step-by-step procedure for the configuration.



LIBERO Cx selected for configuration

Menu: Edit - Device configuration

The following chapters (3.4.1 *Description* - 3.4.6 *Handling Options*) are related to the functions within the menu: Device.

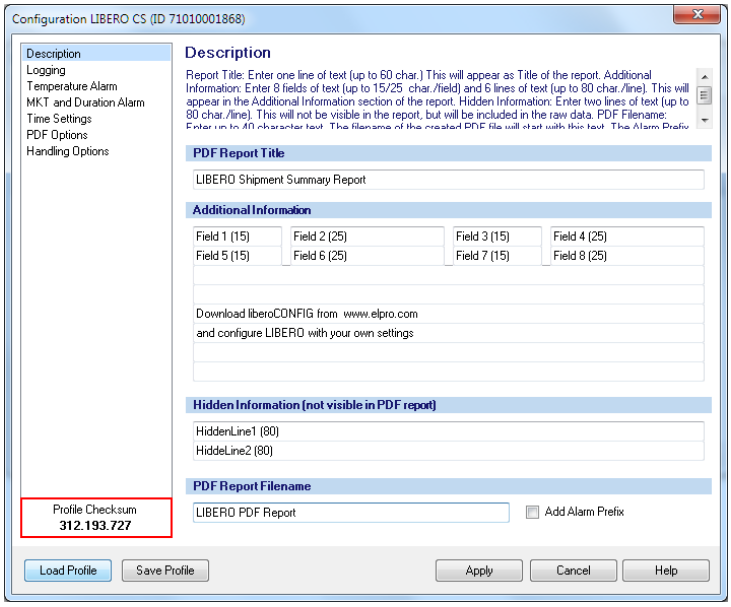
LIBERO Cx Display

⇨ 3.2 *Status information LIBERO Cx display*

Configuration or creation of a configuration file (****.liberoCFG) is only possible if at least one LIBERO Cx is shown in the start window.

3.4.1 Description

Red frame = field with the profile checksum


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Description
Report Title: Enter one line of text (up to 60 char.) This will appear as Title of the report. Additional Information: Enter 8 fields of text (up to 15/25 char./field) and 6 lines of text (up to 80 char./line). This will appear in the Additional Information section of the report. Hidden Information: Enter two lines of text (up to 80 char./line). This will not be visible in the report, but will be included in the raw data. PDF Filename:
PDF Report Title
LIBERO Shipment Summary Report
Additional Information
Field 1 (15)
Field 2 (25)
Field 3 (15)
Field 4 (25)
Field 5 (15)
Field 6 (25)
Field 7 (15)
Field 8 (25)
Download liberoCONFIG from www.elpro.com
and configure LIBERO with your own settings
Hidden Information (not visible in PDF report)
HiddenLine1 (80)
HiddeLine2 (80)
PDF Report Filename
LIBERO PDF Report
Add Alarm Prefix
Profile Checksum
312.193.727
Load Profile
Save Profile
Apply
Cancel
Help

PDF Report Title — Information used as a header on the PDF report; up to 60 characters

Additional Information — Free text that can be added to the profile to appear on the PDF report.

1. 4 text fields limited to 15 characters; fields 1, 3, 5 and 7
2. 4 text fields limited to 25 characters; fields 2, 4, 6 and 8
3. 6 lines of 80 characters

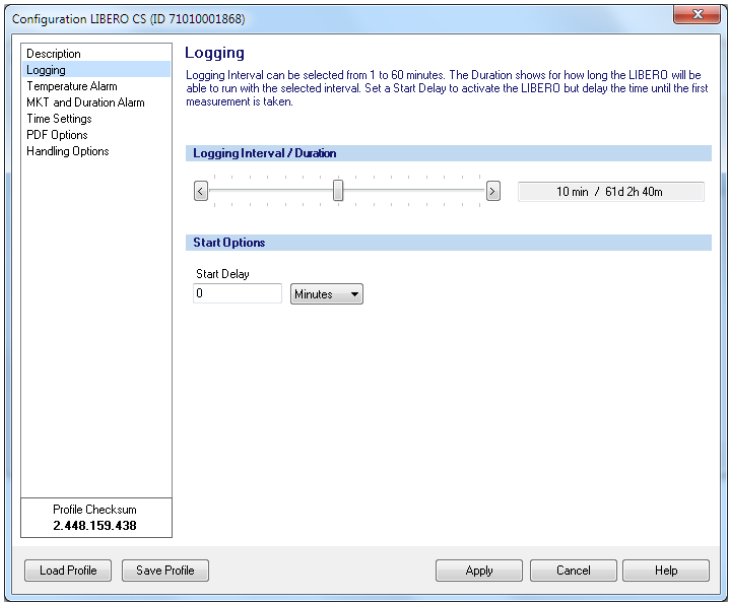
Hidden Information — Two lines with text (limited to 80 characters) that do not appear in the PDF report. This information is only visible in both applications elproVIEWER and liberoMANAGER.

PDF Report Filename — Specified file name of the PDF report.

Add Alarm Prefix — Depending on the recorded data and the alarm conditions, "ALARM" or "OK" is added to the file name.

3.4.2 Logging

The logging interval and recording time will be displayed. You can adjust settings by clicking on the arrow buttons or by dragging the sliding bar.


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Profile Checksum
2.448.159.438
Logging
Logging Interval can be selected from 1 to 60 minutes. The Duration shows for how long the LIBERO will be able to run with the selected interval. Set a Start Delay to activate the LIBERO but delay the time until the first measurement is taken.
Logging Interval / Duration
10 min / 61d 2h 40m
Start Options
Start Delay
0
Minutes
Load Profile
Save Profile
Apply
Cancel
Help

Logging Interval / Duration

The measuring interval ranges from 1 to 60 minutes.

THE DISPLAY OF THE LIBERO CX IS ONLY UPDATED AT THE MEASURING INTERVAL.

Start Options

Start-up delay
After starting the LIBERO Cx by pressing the Start/Stop button, data logging only starts when the delay time has elapsed. "dELY" is shown on the display before logging is started and "Run" flashes.

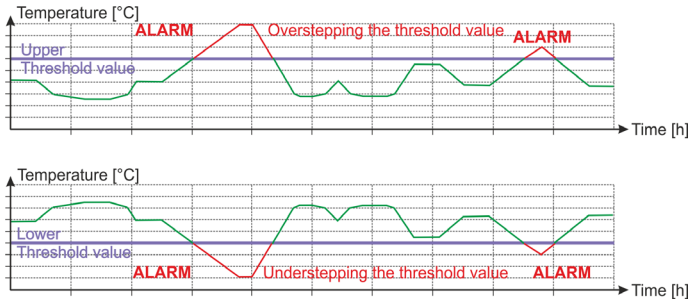
Start delay = 0
After starting the LIBERO Cx by pressing the Start/Stop button, data logging starts immediately. The current measurement value is shown on the display and "Run" flashes.

Logging can also be influenced with "Stop Options" as another parameter.

⇨ 3.4.6 *Handling Options*

3.4.3 Alarm conditions

Threshold violation



AN ALARM CANNOT BE RESET!

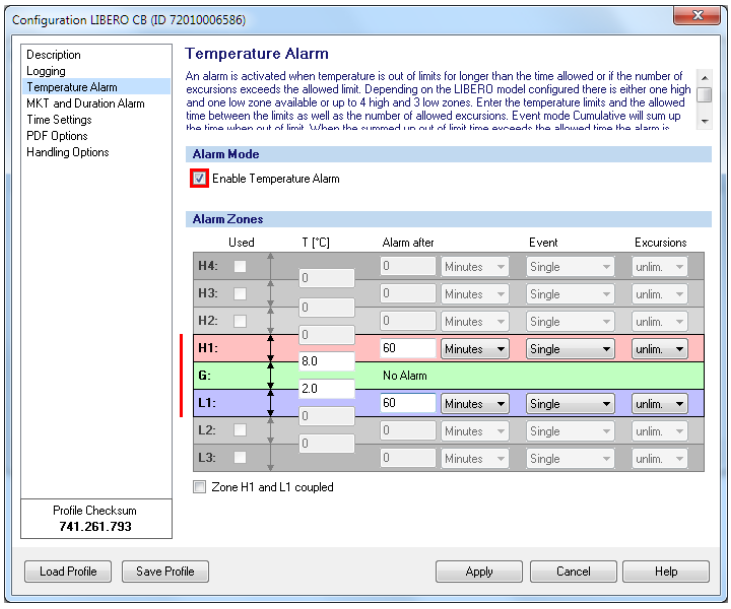
Alarm mode

- There are two different alarm modes:
  - Single alarm zone
  - Multi alarm zone
- The available alarm mode depends on the employed type of the *LIBERO Cx.*
- A checked box activates the alarm mode.

3

3.4.3.1 Single alarm zone, LIBERO CB

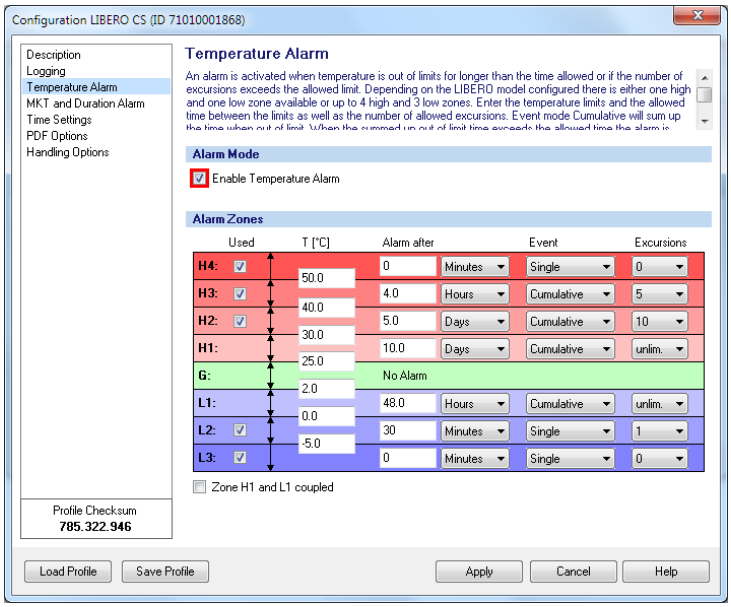
Only alarm zones H1 and L1 are available



Temperature alarm activated for LIBERO CB with single alarm zone

3.4.3.2 Multi alarm zones, LIBERO CS and CI

The function "Multi alarm zones" splits the alarm conditions in up to 8 independent zones; H1 - H4, G and L1 - L3. Zone G represents the temperature range in which none of the alarm conditions are fulfilled.

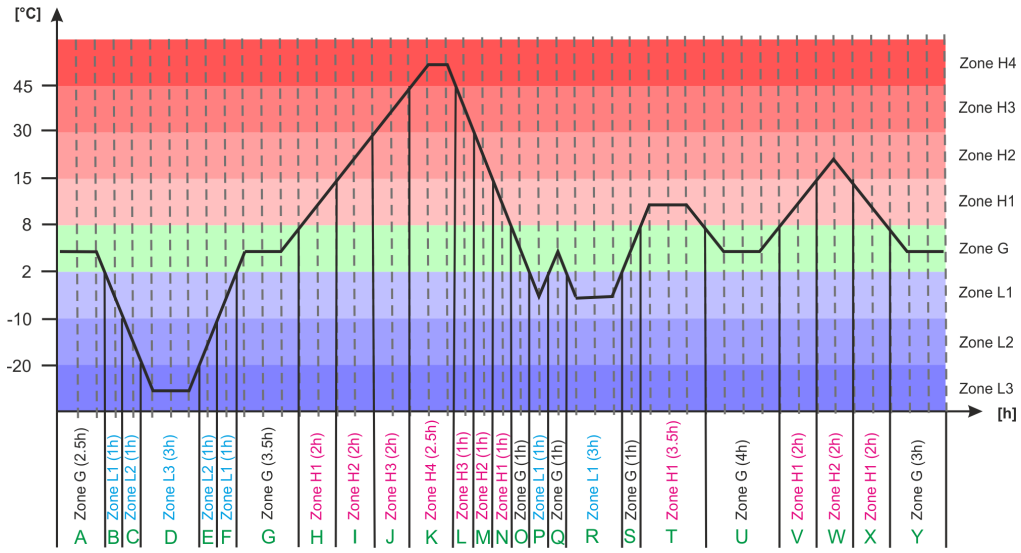

Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Profile Checksum
785.322.946
Temperature Alarm
An alarm is activated when temperature is out of limits for longer than the time allowed or if the number of excursions exceeds the allowed limit. Depending on the LIBERO model configured there is either one high and one low zone available or up to 4 high and 3 low zones. Enter the temperature limits and the allowed time between the limits as well as the number of allowed excursions. Event mode Cumulative will sum up
Alarm Mode
Enable Temperature Alarm
Alarm Zones
Used
T [°C]
Alarm after
Event
Excursions
H4: 50.0 0 Minutes Single 0
H3: 40.0 4.0 Hours Cumulative 5
H2: 30.0 5.0 Days Cumulative 10
H1: 25.0 10.0 Days Cumulative unlim.
G: 2.0 No Alarm
L1: 0.0 48.0 Hours Cumulative unlim.
L2: -5.0 30 Minutes Single 1
L3: 0 Minutes Single 0
Zone H1 and L1 coupled
Load Profile
Save Profile
Apply
Cancel
Help

Temperature alarm activated for LIBERO CS and LIBERO CI with multi alarm zones

Alarm Zones

- Used
  These check boxes are used to select the desired alarm zones.
- T[°C] or T[°F]
  Data entry fields for the threshold values.
- Alarm after
  An alarm is not triggered until the threshold violation has lasted longer than the specified time.
- Event
  - Single
    The delay time restarts for each threshold violation.
  - Cumulative
    An alarm will be triggered as soon as the elapsed time of all violations together has reached the delay time.
- Excursions
  Accepted number of excursions, without respect to the set alarm delay time.
- Zone H1 + L1 coupled.
  If this field is checked, the information entered for the alarm zone in H1 are used for both H1 overstepping and L1 understepping. (Total time and number of excursions overstepping and understepping).

Graphical Representation / Evaluation



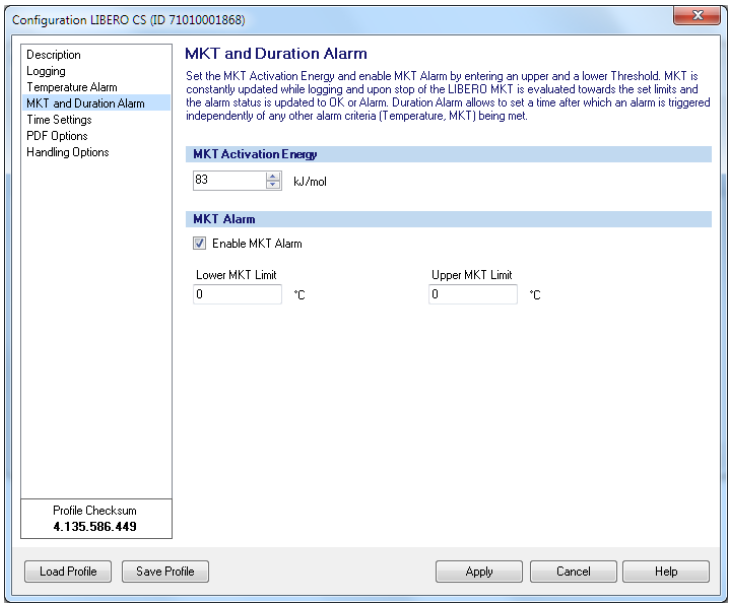
Temperature plot with zones

Data

Zone	Tempera-ture range [°C]	Alarm duration Add-up time [h]	Number of thresh-old violations	Plot section used for calculation
H4	over 45	2.5	1	K
H3	over 30	5.5	3	J+K+L
H2	over 15	10.5	6	I+J+K+L+M+W
H1	over 8	21	11	H+I+J+K+L+M+N+T+ V+W+X
G	2 to 8	16	7	A+G+O+Q+S+U+Y
L1	below 2	11	7	B+C+D+E+F+P+R
L2	below -10	5	3	C+D+E
L3	below -20	3	1	D

3.4.3.3 MKT Alarm

MKT Mean Kinetic Temperature


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
MKT and Duration Alarm
Set the MKT Activation Energy and enable MKT Alarm by entering an upper and a lower Threshold. MKT is constantly updated while logging and upon stop of the LIBERO MKT is evaluated towards the set limits and the alarm status is updated to OK or Alarm. Duration Alarm allows to set a time after which an alarm is triggered independently of any other alarm criteria (Temperature, MKT) being met.
MKT Activation Energy
83
kJ/mol
MKT Alarm
Enable MKT Alarm
Lower MKT Limit
0
°C
Upper MKT Limit
0
°C
Profile Checksum
4.135.586.449
Load Profile
Save Profile
Apply
Cancel
Help

MKT alarm and duration alarm

> *Only the section "MKT Alarm" is shown on this screen. For the maximum duration see 3.4.3.4 Duration Alarm*

3

MKT Activation Energy

Possibility to enter a product specific value for the MKT activation energy between 42.... 125 kJ/mol. (standard value: 83 kJ/mol.)

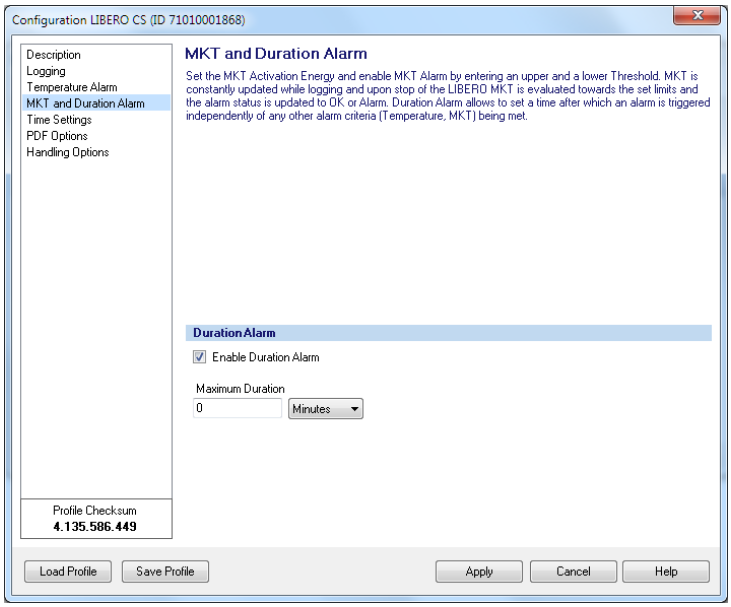
MKT Alarm

- Enable MKT alarm
  A checked box activates the alarm mode.
- Lower MKT Limit
  Data entry field for the threshold value.
- Upper MKT Limit
  Data entry field for the threshold value.

> As a reference value for the lower MKT threshold we recommend 0 °C. This entry only serves to complete the general specifications for threshold values (min. - max. value).

3.4.3.4 Duration Alarm

Logging time


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Profile Checksum
4.135.586.449
MKT and Duration Alarm
Set the MKT Activation Energy and enable MKT Alarm by entering an upper and a lower Threshold. MKT is constantly updated while logging and upon stop of the LIBERO MKT is evaluated towards the set limits and the alarm status is updated to OK or Alarm. Duration Alarm allows to set a time after which an alarm is triggered independently of any other alarm criteria (Temperature, MKT) being met.
Duration Alarm
Enable Duration Alarm
Maximum Duration
0
Minutes
Load Profile
Save Profile
Apply
Cancel
Help

MKT alarm and duration alarm

3

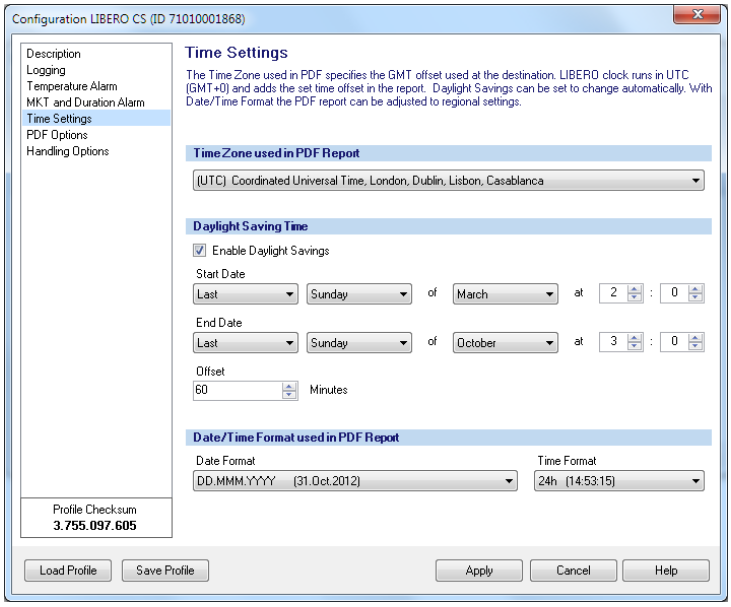
Only the section "Duration Alarm" is shown on this screen. For MKT see 3.4.3.3 MKT Alarm

Duration Alarm

- A checked box activates the alarm mode.
  An alarm is triggered if the logging time oversteps this value.
- Maximum Duration
  Data entry field for the threshold value.
  Maximum possible alarm duration = logging interval * 8800 measurements

3.4.4 Time settings

Country-specific settings.



Time Zone used in PDF Report

Represents the time zone used in the PDF report. This setting is based on UTC.

Daylight Saving Time

A checked box activates switchover between daylight saving time and winter time.

Data input fields for:

- Start date
- End date
- Offset (difference between daylight saving time and winter time)

Default setting

UTC

Date/Time format used in PDF Report

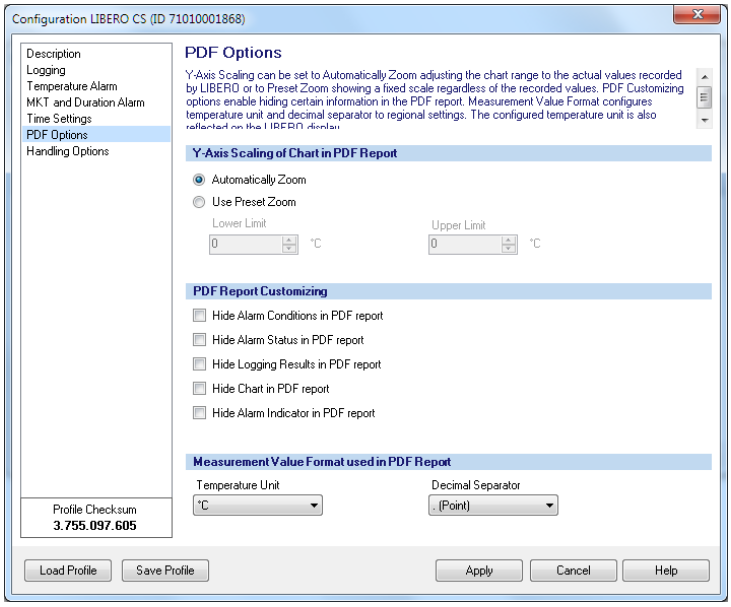
Choose format settings for date and time.

Default setting

DD.MMM.YYYY (31.Oct.2012)

3.4.5 PDF Options

Selection of the information contained in the PDF Report


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Profile Checksum
3.755.097.605
PDF Options
Y-Axis Scaling can be set to Automatically Zoom adjusting the chart range to the actual values recorded by LIBERO or to Preset Zoom showing a fixed scale regardless of the recorded values. PDF Customizing options enable hiding certain information in the PDF report. Measurement Value Format configures temperature unit and decimal separator to regional settings. The configured temperature unit is also
Y-Axis Scaling of Chart in PDF Report
Automatically Zoom
Use Preset Zoom
Lower Limit
Upper Limit
°C
PDF Report Customizing
Hide Alarm Conditions in PDF report
Hide Alarm Status in PDF report
Hide Logging Results in PDF report
Hide Chart in PDF report
Hide Alarm Indicator in PDF report
Measurement Value Format used in PDF Report
Temperature Unit
Decimal Separator
°C
. (Point)
Load Profile
Save Profile
Apply
Cancel
Help

Y-Axis Scaling of Chart in PDF Report

- Automatically Zoom
  The Y-axis will automatically be scaled according to the range of the measured values.
- Use Preset Zoom
  The Y-axis will be scaled according to the lower and upper threshold values.

PDF Report Customizing

The following customizing options are activated by a checked box.

- Hide alarm conditions in the PDF report
- Hide the alarm status in the PDF report
- Hide logging results in the PDF report
- Hide the chart in the PDF report
- Hide the alarm indicator in the PDF report

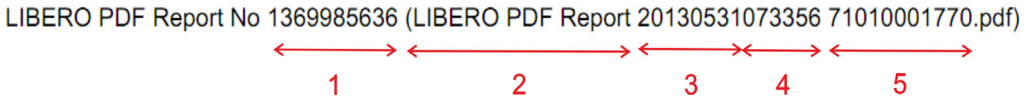
Measurement Value Format used in PDF Report

Selection of various display formats for

- Temperature unit °C or °F
- Decimal separator: xx.yy (point) or xx,yy (comma) status information

3.4.5.1 Status information and error messages in the PDF report

File name



1. Unique PDF report number comprising the device ID and the timestamp of the PDF report
2. File name specified for the PDF report during configuration
3. Date of report creation
4. Time of report creation
5. Device ID

Logging Results - File created

This timestamp corresponds to the time at which the LIBERO Cx was connected to a USB interface for the first time.

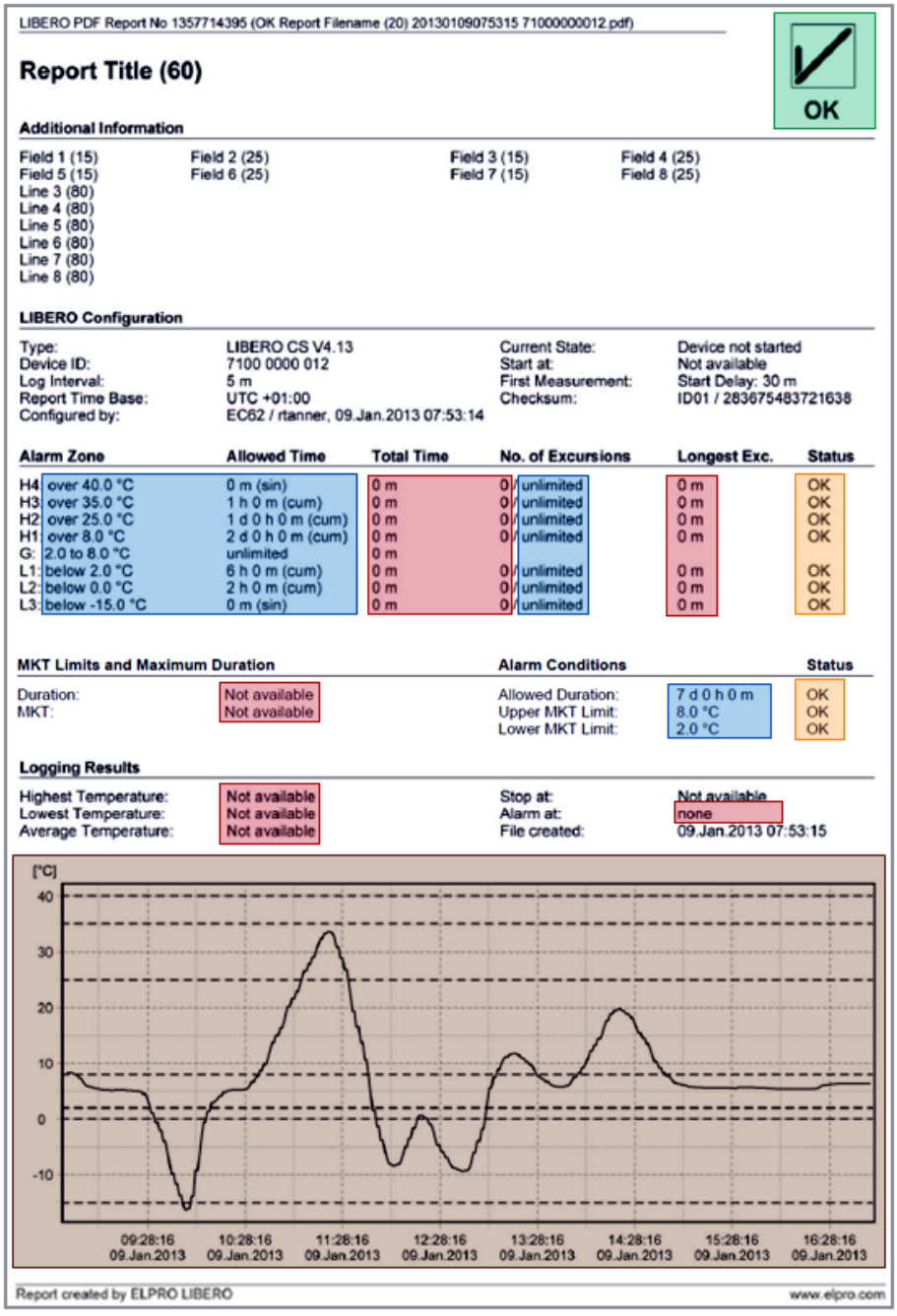
WARNING: Device Error EXXX

In the event of an error or if the data are not complete, a warning is given with an error code above the graph.

WARNING: Device used outside of specification

If at least one measurement value is outside the specified application range, an error message is printed above the graph.

3.4.5.2 Example: PDF report



LIBERO PDF Report No 1357714395 (OK Report Filename (20) 20130109075315 71000000012.pdf)

Report Title (60)

OK

Additional Information

Field 1 (15) Field 2 (25) Field 3 (15) Field 4 (25)
Field 5 (15) Field 6 (25) Field 7 (15) Field 8 (25)
Line 3 (80)
Line 4 (80)
Line 5 (80)
Line 6 (80)
Line 7 (80)
Line 8 (80)

LIBERO Configuration

Type:	LIBERO CS V4.13	Current State:	Device not started
Device ID:	7100 0000 012	Start at:	Not available
Log Interval:	5 m	First Measurement:	Start Delay: 30 m
Report Time Base:	UTC +01:00	Checksum:	ID01 / 283675483721638
Configured by:	EC62 / rtanner, 09.Jan.2013 07:53:14		

Alarm Zone	Allowed Time	Total Time	No. of Excursions	Longest Exc.	Status
H4 over 40.0 °C	0 m (sin)	0 m	0 / unlimited	0 m	OK
H3 over 35.0 °C	1 h 0 m (cum)	0 m	0 / unlimited	0 m	OK
H2 over 25.0 °C	1 d 0 h 0 m (cum)	0 m	0 / unlimited	0 m	OK
H1 over 8.0 °C	2 d 0 h 0 m (cum)	0 m	0 / unlimited	0 m	OK
G: 2.0 to 8.0 °C	unlimited	0 m			
L1: below 2.0 °C	6 h 0 m (cum)	0 m	0 / unlimited	0 m	OK
L2: below 0.0 °C	2 h 0 m (cum)	0 m	0 / unlimited	0 m	OK
L3: below -15.0 °C	0 m (sin)	0 m	0 / unlimited	0 m	OK

MKT Limits and Maximum Duration		Alarm Conditions		Status
Duration:	Not available	Allowed Duration:	7 d 0 h 0 m	OK
MKT:	Not available	Upper MKT Limit:	8.0 °C	OK
		Lower MKT Limit:	2.0 °C	OK

Logging Results

Highest Temperature:	Not available	Stop at:	Not available
Lowest Temperature:	Not available	Alarm at:	none
Average Temperature:	Not available	File created:	09.Jan.2013 07:53:15

Report created by ELPRO LIBERO www.elpro.com

Hide alarm conditions in the PDF report

Hide the alarm status in the PDF report

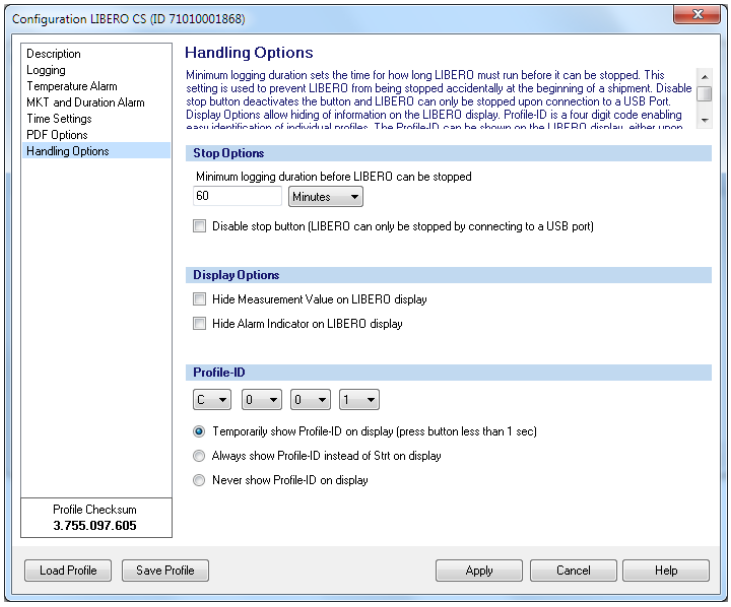
Hide the alarm indicator in the PDF report

Hide logging results in the PDF report

Hide the chart in the PDF report (Only LIBERO CS and CB)

3.4.6 Handling Options

Are used to specify the button functionality, the data shown on the display and the specified Profile-ID.


Configuration LIBERO CS (ID 71010001868)
Description
Logging
Temperature Alarm
MKT and Duration Alarm
Time Settings
PDF Options
Handling Options
Handling Options
Minimum logging duration sets the time for how long LIBERO must run before it can be stopped. This setting is used to prevent LIBERO from being stopped accidentally at the beginning of a shipment. Disable stop button deactivates the button and LIBERO can only be stopped upon connection to a USB Port. Display Options allow hiding of information on the LIBERO display. Profile-ID is a four digit code enabling
Stop Options
Minimum logging duration before LIBERO can be stopped
60
Minutes
Disable stop button (LIBERO can only be stopped by connecting to a USB port)
Display Options
Hide Measurement Value on LIBERO display
Hide Alarm Indicator on LIBERO display
Profile-ID
C
0
0
1
Temporarily show Profile-ID on display (press button less than 1 sec)
Always show Profile-ID instead of Strt on display
Never show Profile-ID on display
Profile Checksum
3.755.097.605
Load Profile
Save Profile
Apply
Cancel
Help

Stop Options

- Minimum logging duration
  Enter the minimum logging time. During this time the, LIBERO Cx cannot be stopped with the Start/Stop button or by connecting it to a USB interface.

- Disable stop button
  When the box is checked, logging can only be stopped by connecting to a USB port.

Display Options

By checking the box it is possible to:

- Hide the measurement value on the LIBERO Cx display

- Hide the alarm indicator on the LIBERO Cx display

Profile-ID

- 4 selection windows for defining the Profile-ID

The character set for the Profile-ID is restricted to the display capability.

- 3 display options for the Profile-ID
  Different views are shown on the LIBERO Cx display depending on the selected option.

- Temporarily show the Profile-ID on the display
  The Profile-ID is displayed by briefly pressing the Start/Stop button (less than 1 second)
- Always show Profile-ID instead of "Strt"
- Never show the Profile-ID

Default setting C001

3.4.7 Apply Configuration Profile

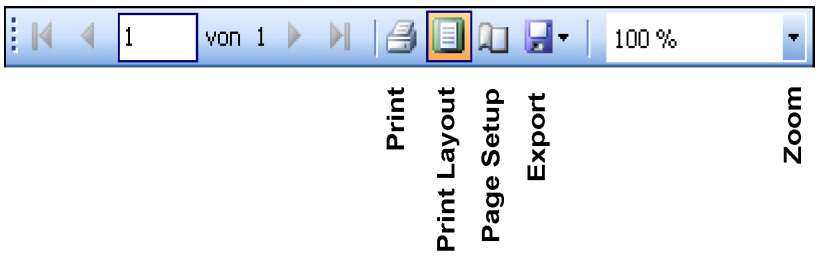
All selected LIBERO Cx are directly assigned a previously saved profile.

3

3.4.8 View/Print configuration

Creates a report with all configuration data. This report contains as many pages as LIBERO Cx selected.

3.4.8.1 Example: Configuration report



Menu bar

LIBERO Configuration Report

Profile Checksum:	2.068.027.152	Configuration Password:	No
Profile-ID:	dEnn	Data Access Password:	No
Type:	LIBERO CS (V 4.13)	Expiry Date:	06/2014
Logger ID:	7101 0001 868	Start Delay:	10 m
Log Interval / Duration:	10 min / 61d 2h 40m		
Configured by:	C1361, EC82/agubler 02.07.2013 13:38:19 (UTC)		
Report Title:	Your LIBERO CS Sample PDF Report		
Info Field 1-4:			
Info Field 5-8:			
Info Line 3:	The LIBERO C portfolio includes a Multi-Level PDF Logger, a Multi-Level		
Info Line 4:	PDF Indicator and a PDF Logger with upper and lower alarm thresholds.		
Info Line 5:	Besides many innovative features such as secure Start/Stop button, minimum		
Info Line 6:	logging time before LIBERO can be stopped or auto expiry functionality, all		
Info Line 7:	LIBERO C models can alarm based on duration or MKT.		
Info Line 8:	This is a sample only, download liberoCONFIG and create your own settings.		
Hidden Line 1:			
Hidden Line 2:			
Filename:	LIBERO CS Demo PDF Report		

Temperature:	**Allowed Time:**	**Event Mode:**	**Allowed Excursions**
H4: over 50,0 °C	0 m	Single	0
H3: over 40,0 °C	4,0 h	Cumulative	5
H2: over 30,0 °C	5,0 d	Cumulative	10
H1: over 25,0 °C	10,0 d	Cumulative	unlimited
G: 2,0 °C to 25,0 °C	unlimited		
L1: below 2,0 °C	48,0 h	Cumulative	unlimited
L2: below 0,0 °C	30 m	Single	1
L3: below -5,0 °C	0 m	Single	0
Zone 3+5 coupled:	No		

MKT Alarm Enabled:	No	MKT Activation Energy:	83 kJ/mol
Duration Alarm Enabled:	No		
Time Zone:	UTC +00:00	Daylight Saving Time:	No
Date Format:	DD.MMM.YYYY	Time Format:	24h
Temperature Unit:	°C	Decimal Separator:	. (Point)

Y-Axis Scaling of Chart:	Automatically Zoom				
Hide Alarm Conditions:	No	Hide Alarm Status:	No	Hide Logging Results:	Yes
Hide Chart:	No	Hide Alarm Indicator:	No		
Minimum Logging Duration:	80 m	Stop Button Disabled:	No	Display Hide Meas.:	No
Display Hide Indicator:	No	Profile-ID on Display:	by button		

Printed: liberoCONFIG 2013.6.1.0 / agubler / 03.07.2013

3

3.5 Passwords

LIBERO Cx uses 2 different password functions. Both passwords can be set, changed and reset as long as the LIBERO Cx has not been started.

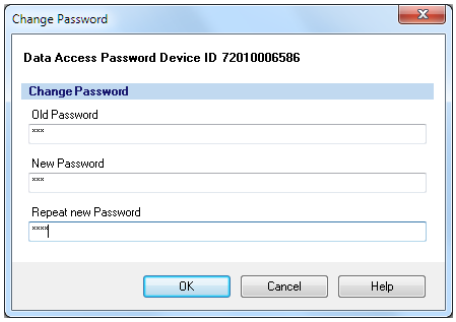
- Configuration password

  Is used to protect the LIBERO Cx against unauthorized configuration changes.

- Data access password

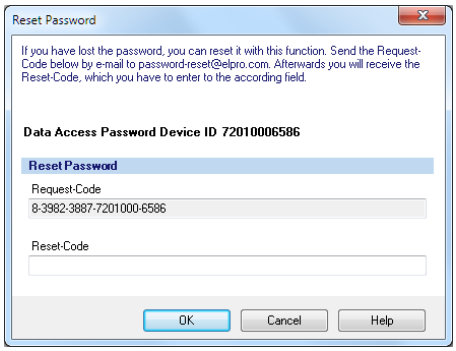
  If a data access password is set, the data of the PDF report can only be evaluated if the password is known.

Set/Change



If "New Password" & "Retype new Password" are left blank, the password will be reset.

Reset


Reset Password
If you have lost the password, you can reset it with this function. Send the Request-Code below by e-mail to password-reset@elpro.com. Afterwards you will receive the Reset-Code, which you have to enter to the according field.
Data Access Password Device ID 72010006586
Reset Password
Request-Code
8-3982-3887-7201000-6586
Reset-Code
OK
Cancel
Help

If you have forgotten the password:

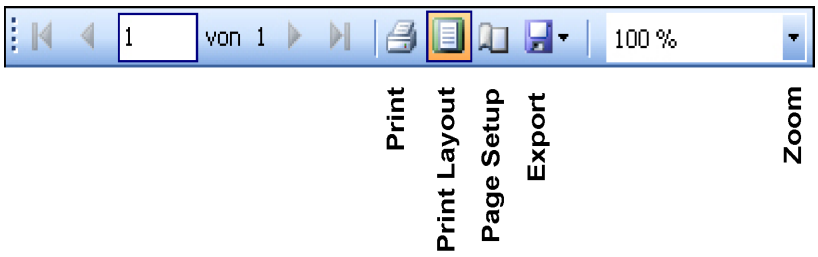
1. To reset the password the displayed "Request-Code" and the ID number has to be mailed to ELPRO-BUCHS AG (password-reset@elpro.com).
2. ELPRO-BUCHS AG will send the "Reset Code" by e-mail after clarifying ownership.

Calculation of the "Reset Code" is only possible at ELPRO-BUCHS AG. This code is just valid for the respective LIBERO Cx.

3.6 Calibration - View/Print

Creates a validation certificate for all selected LIBERO Cx. This contains as many pages as LIBERO Cx selected.

Example: Validation certificate



Menu bar

Validation Certificate

Certificate Number: **VC-71010001868**

Device Type:	LIBERO CS
Device ID:	7101 0001 868
Device Revision:	4.13
Expiry date:	End of 06/2014

ELPRO performs a 100% temperature calibration of all sensors plus a 100% electrical calibration during assembling. With an additional rolling "Lot Acceptance Test" based on the daily production, the measurement accuracy and device functionality is verified and documented. ELPRO-BUCHS AG certifies that the LIBERO mentioned above has been manufactured according to ELPRO's Quality Assurance procedures and has passed the following tests:

Test	Test and method	Acceptance criteria	Result
Temperature calibration of sensor	Temperature calibration at 0 °C in liquid	±0.3 °C	passed
	Temperature calibration at 15 °C in liquid	±0.3 °C	passed
	Temperature calibration at 25 °C in liquid	±0.3 °C	passed
Electrical calibration of LIBERO during assembling	Electrical calibration at -3 °C	±0.2 °C	passed
	Electrical calibration at 25 °C	±0.2 °C	passed
"Lot Acceptance Test"	System calibration and functionality test at -10 °C in liquid	±1.0 °C	passed
	System calibration and functionality test at 0 °C in liquid	±0.5 °C	passed
	System calibration and functionality test at 25 °C in liquid	±0.5 °C	passed

All used reference standards are certified by SCS (Swiss Calibration Service) and traceable to the national standard (equivalent to NIST, UKAS, DKD).

All certificates for the used reference standards are on file at ELPRO BUCHS-AG.

This is a non-signed document produced (and reproduceable) by a validated system. Page 1/1

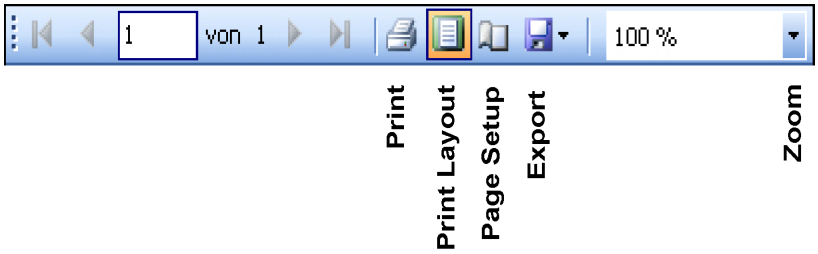
3.7 Check PDF Report Integrity

The software liberoCONFIG has the capability to validate the integrity of the PDF report. If the files have passed, test results will be shown and can be printed or archived.

Procedure: LIBERO PDF Report Integrity

1. Select and open PDF files which should be checked.
2. Check PDF File
   A report with the check results will be created. This report contains as many pages as LIBERO Cx selected.

3.7.1 Example: Check the PDF Report Integrity



Menu bar

Check LIBERO PDF File Integrity

Device

Logger ID:	71010001868
Type:	LIBERO CS

PDF File

Report number:	1372767794
File created:	02.07.2013 12:23:14 (UTC +00:00)
File name:	M:\Entwicklung\Dokumentation\Anleitungen\LI Libero\LIBERO C - Diverses\Testdateien\OK LIBEROCS Demo PDF Report 20130702122314 71010001868.pdf

Check Results

File content:	**Checked - OK**
Embedded data:	**Checked - OK**

Printed: liberoCONFIG 2013.6.1.0 / agubler / 02.07.2013

3.8 LIBERO SmartStart settings

LIBERO SmartStart Create and make settings see *3.3.2 Menus - Extras*

The LIBERO SmartStart application allows bulk configuration of multiple LIBERO Cx with the same settings without the need for software installation via a LIBERO SmartStart Pack & Go (.exe) file. End users can use the Pack & Go to select from a list of possible predefined profiles and then have the option to add shipment-specific information that will later appear on the PDF report. The LIBERO Cx can be configured in a quick, simple and absolutely safe way from any PC without a software installation.

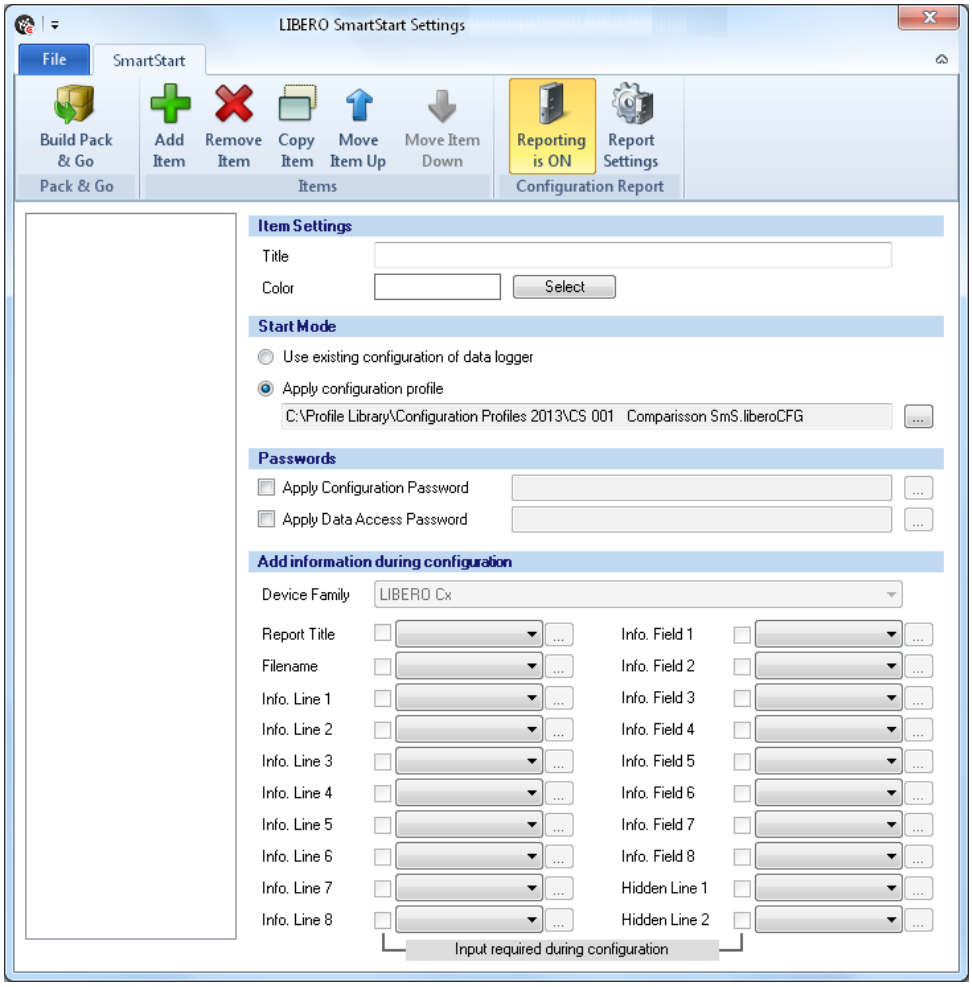
First, the "LIBERO SmartStart Settings" menu is used to select configuration profiles that have already been created and saved. An appropriate title and color are assigend to each profile for easier selection.
Then, the LIBERO SmartStart allows additional information fields to be defined so that shipment-specific information can be easily added (i.e. carrier, tracking number) and viewable on the PDF report. During the final programming process, information can be added either in the form of plain text or dropdown menu. All other critical device settings in the configuration profile, such as handling and alarm settings, are static and cannot be changed. After the initial settings are defined in the LIBERO SmartStart menu, a LIBERO SmartStart Pack & Go file (*.exe) file is created.

Another feature of the LIBERO SmartStart Pack & Go is an automatic report of the LIBERO ID, applied configuration profiles and the additional information that was entered. The automatic report is called the SmartStart Configuration Report (SSCR). The SSCR can be processed further and replaced error-prone manual listings of which LIBERO data logger (or indicator) is contained in which shipment.

The basic configuration process using Pack & Go is as follows:

1. Open the Pack & Go file
2. Select the appropriate configuration profile (by name and/or color)
3. Add shipment-specific information manually or from a drop-down menu

Start



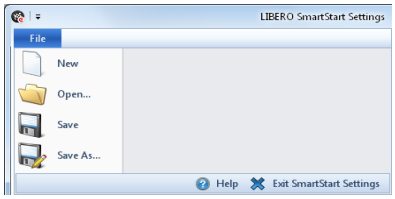
LIBERO SmartStart Settings

⇨ 3.8.1 *Items*

⇨ 3.8.2 *Configuration Report*

⇨ 3.8.3 *Create SmartStart Pack & Go*

File

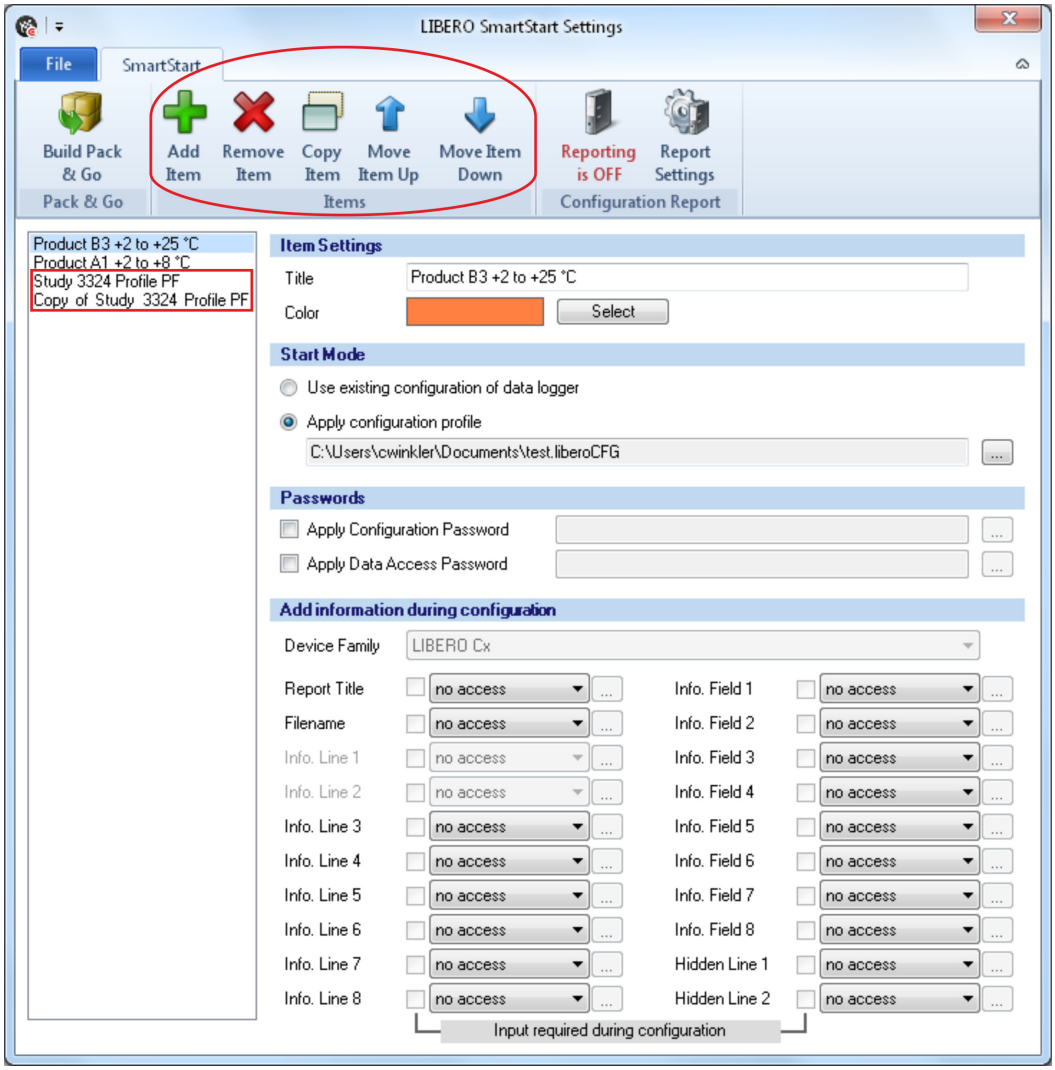


⇨ Return to liberoCONFIG.

File format ****.liberoSMS

3.8.1 Items

Manage items



Overview: LIBERO SmartStart Settings

Icons

Use the "Items" function to add, modify or remove new items of the LIBERO SmartStart file. The new entry is added at the end of the list. Up to 500 LIBERO SmartStart items can be defined.

Typically one item is created per profile, product or study number.

Adds a copy of the selected items to the item list with the name: "Copy of xxxxx". This copy can be used as the basis for another item.

The respective input field is activated by checking the box.

This icon opens a window for the definition of the variable information.

Item settings

- Title

  The title is the designation for the selected item. Enter a short, clear name.

- Color

  Each item can be assigned a color. The color serves to identify the item quickly at a later point while working with LIBERO SmartStart.

Start mode

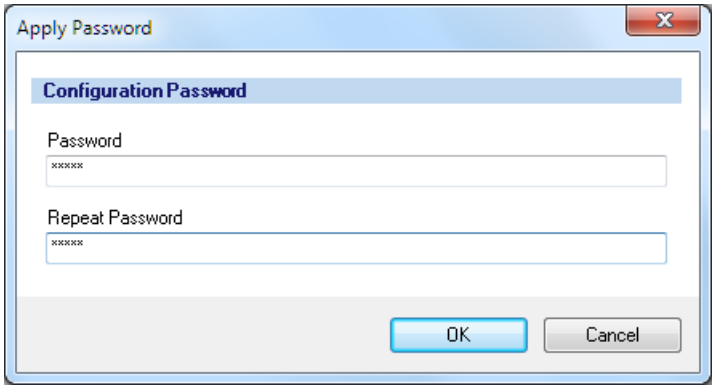
- Use existing data logger configuration
  Is used if it is not necessary to assign a specific profile to the LIBERO Cx. The LIBERO Cx retains the current configuration.
- Apply configuration profile
  A profile previously created with liberoCONFIG is used.

ONLY PROFILES FROM THE SAME LIBERO DEVICE FAMILY CAN BE ASSIGNED.

Passwords

Configuration and data access passwords can be entered. They will be automatically added to each LIBERO configured with LIBERO SmartStart.

- A checked box opens the window for entering the password.
- An empty field deletes the existing password.



Apply password

3.8.1.1 Add information during configuration

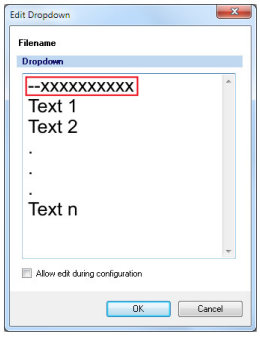
Device family

Manual or automatic recognition of the device family.

- When a configuration profile is assigned, LIBERO SmartStart automatically enables the available information options.
- If the existing LIBERO configuration is used, manually select which device family is used.

Add information during configuration

It is possible to make entries for all variable information of the PDF report during profile assignment.



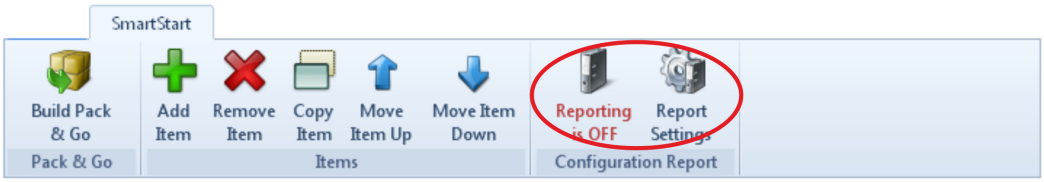
no access:	There are no entries possible If all entries are set to "no access", no entry prompts appear during profile assignment with SmartStart Pack & Go. In all other cases an entry window is opened to enter text with a barcode reader or with the keyboard.
add text	Entries can be added to the existing text.
edit text	The existing text can be supplemented and changed.
add dropdown	Opens the "Edit Dropdown" window for selection of predefined information. The existing line content is supplemented.
insert dropdown	Opens the "Edit Dropdown" window for selecting pre-defined information. The existing line content is always overwritten.

Commentary

--XXXXXXXXXX	Two minus signs in front of the text are treated as a comment in the dropdown and cannot be added or inserted in a mandatory field.
☑	A checked box permits editing of the text in the "Dropdown" list during configuration.
Input required during configuration	Successful configuration is only possible when all activated fields are filled out.

3.8.2 Configuration Report

The configuration report is optional extra and not required for LIBERO SmartStart Pack & Go to function correctly.
If no automatic reporting of the configured LIBERO Cx is needed, skip this section and continue with 3.8.3 *Create SmartStart Pack & Go*.



Menu bar - configuration report

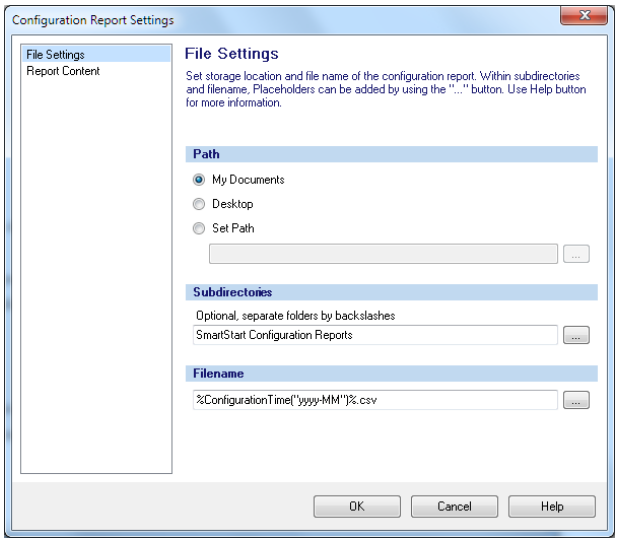
The configuration report documents all configurations done by LIBERO SmartStart. With the aid of the "Placeholder Editor" the used file name, path and the parameters documented may be customized.

Reporting ON / OFF

Configuration report - ON

The logging of the actions in the configuration report is switched on.

3.8.2.1 Report Settings



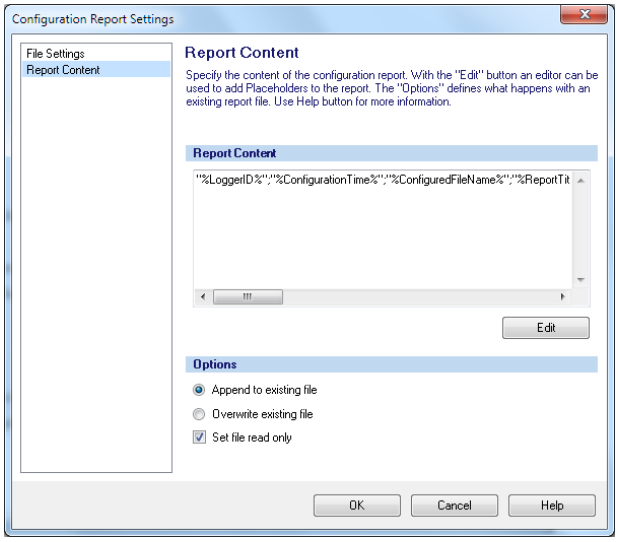
File settings

Path Default setting for saving the configuration report.

Subdirectories

Filename

This button is used to insert placeholders for the designation of subdirectories and file names.


Configuration Report Settings
File Settings
Report Content
Report Content
Specify the content of the configuration report. With the "Edit" button an editor can be used to add Placeholders to the report. The "Options" defines what happens with an existing report file. Use Help button for more information.
Report Content
"%LoggerID%","%ConfigurationTime%","%ConfiguredFileName%","%ReportTit
Edit
Options
Append to existing file
Overwrite existing file
Set file read only
OK
Cancel
Help

Report Content This window is used to define the placeholders and the formats used to create the report.

Options

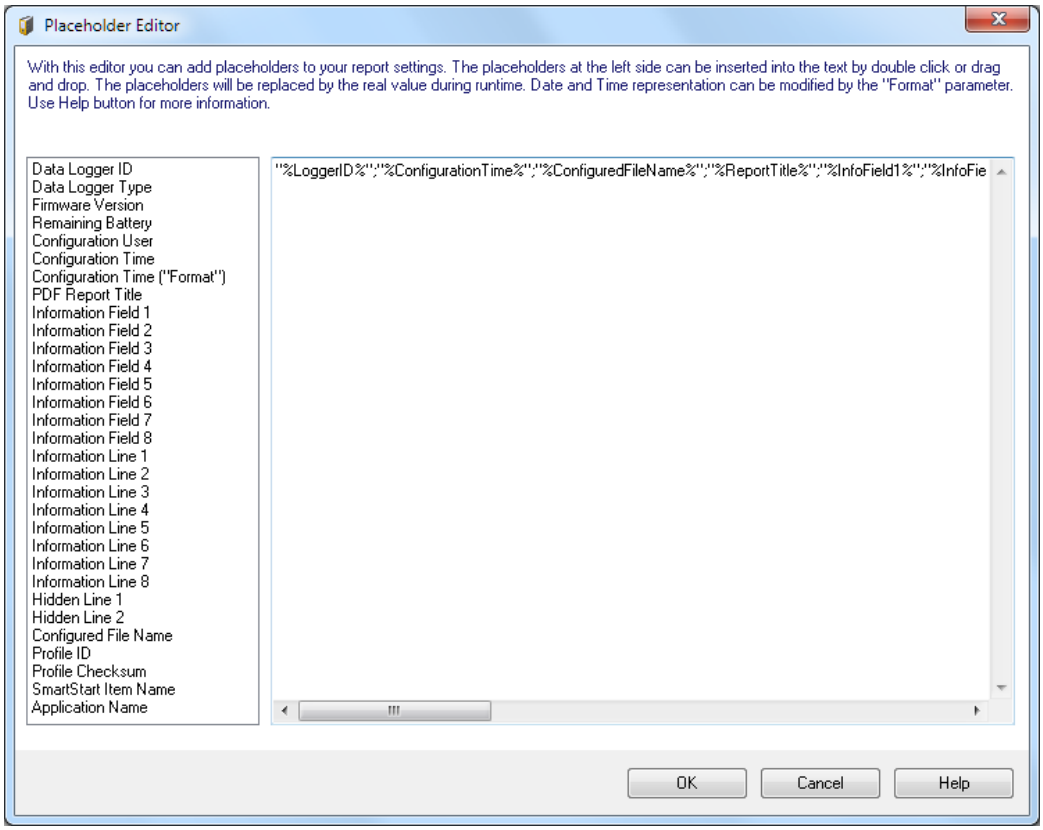
The current report can be added as an extension to the existing one or the existing report replaced by the new one.

Edit

This button starts the „Placeholder Editor“. The selected placeholders determine the content of the PDF report.

3.8.2.2 Placeholder Editor

	Example
Placeholders are expressions that appear as variable information in the report.	Data logger ID
This is the syntax of the placeholder "DataloggerID" as shown in the window.	%Logger ID%
During the creation of the PDF report the placeholder is replaced by the current information, of the LIBERO configured with LIBERO SmartStart.	71010001789


Placeholder Editor
With this editor you can add placeholders to your report settings. The placeholders at the left side can be inserted into the text by double click or drag and drop. The placeholders will be replaced by the real value during runtime. Date and Time representation can be modified by the "Format" parameter. Use Help button for more information.
Data Logger ID
Data Logger Type
Firmware Version
Remaining Battery
Configuration User
Configuration Time
Configuration Time ("Format")
PDF Report Title
Information Field 1
Information Field 2
Information Field 3
Information Field 4
Information Field 5
Information Field 6
Information Field 7
Information Field 8
Information Line 1
Information Line 2
Information Line 3
Information Line 4
Information Line 5
Information Line 6
Information Line 7
Information Line 8
Hidden Line 1
Hidden Line 2
Configured File Name
Profile ID
Profile Checksum
SmartStart Item Name
Application Name
"%LoggerID%";"%ConfigurationTime%";"%ConfiguredFileName%";"%ReportTitle%";"%InfoField1%";"%InfoFie
OK
Cancel
Help

Description	Syntax	Function
Data Logger ID	%LoggerID%	ID of the data logger configured with SmartStart.
Data Logger Type	%LoggerType%	Type of the LIBERO Cx (CB, CI, CS), configured with LIBERO SmartStart.
Firmware Version	%FirmwareVersion%	Firmware version of the LIBERO Cx configured with LIBERO SmartStart.
Remaining Battery	%RemainingBattery%	Current battery level of the LIBERO Cx at the time of configuration with SmartStart.
Configuration User	%ConfigurationBy%	Computer and user name
Configuration Time	%ConfigurationTime%	Point of time of the data logger configuration. Format settings according to regional settings of the computer. Time zone corresponds to PDF settings.
Configuration Time ("Format")	%Configuration-Time("Format")%	Time of the configuration of the LIBERO Cx with user-defined date-time format
PDF Report Title	%ReportTitle%	Title of the PDF report ⇨ 3.4.1 *Description*
Information Field 1 ... 8	%InfoField1% ... %InfoField8%	Field 1 to 8 of the additional information in the PDF ⇨ 3.4.1 *Description*
Information Line 1 ... 8	%InfoLine1% ... %InfoLine8%	Line 1 to 8 of the additional information in the PDF ⇨ 3.4.1 *Description*
Hidden Line 1... 2	%HiddenLine1% %HiddenLine2%	Hidden line 1 to 2 of the additional information in the PDF ⇨ 3.4.1 *Description*
Configured File Name	%ConfiguredFile-Name%	Configured PDF file name ⇨ 3.4.1 *Description*
Profile-ID	%ProfileID%	User defined profile ID ⇨ *Profile-ID*

Description	Syntax	Function
Profile Checksum	%ProfileChecksum%	Automatically calculated checksum
SmartStart Item Name	%SmartStartItem-Name%	Name of the selected LIBERO SmartStart item
Application Name	%ApplicationName%	Corresponds to the "Window Title" ⇨ 3.8.3 *Create SmartStart Pack & Go*

Placeholder: Configuration Time ("Format")

This placeholder allows a customized date and time format.

Placeholder	Function
dd	Day with leading zero
MM	Month with leading zero
MMM	Shortcut month (Jan, Feb, Mar. ..)
MMMM	Name of month not abbreviated
yyyy	Year with four digits
hh	Time in 12-hour format with leading zero
HH	Time in 24-hour format with leading zero
mm	Minutes with leading zero
ss	Seconds with leading zero
tt	AM/PM designator
zzz	UTC Offset in format hh:mm

Variables

Examples

("Format")	
yyyy MMM dd hh:mm:ss	2013 Jul. 17 16:23:12
dd MMM. yyyy	17 Jul. 2013
yyyy-MM	2013-07
dd/MM/yyyy	17/07/2013

3.8.2.3 Example of a configuration report

The following line numbers refer to the line of text in the "Placeholder Editor"

The used control characters quotation marks ("...") and semicolon (;) are interpreted according to the country settings of MS Excel. Depending on the country settings different characters for the described functions have to be used.

Notes

Line	Description
1	Date and time configured with the placeholder: Configuration time ("Format") configured.
2	Text
3	- Always use placeholder with quotation marks. In this case a semicolon (;) used within the text of the placeholder, will not be interpreted as column formatting. - Semicolon (;) between placeholders are used for column formatting. - Control characters have no effect on reports opened with an editor.
4	Entire line in quotes - Text and parameters are not separated into different columns. - Control characters have no effect on reports opened with an editor.

Placeholder Editor examples

1) %ConfigurationTime("yyyy MMM dd hh:mm")%
2) Datlogger Type and ID
3) ""Datlogger Type and ID";"%LoggerID%";"%LoggerType%""
4) ""Datlogger Type and ID;%LoggerID%;%LoggerType%""

Report opened with MS Excel

	A	B	C
1	2011 Jan 19 01:23		
2	Datlogger Type and ID		
3	Datlogger Type and ID	16002844	Te1-N
4	Datlogger Type and ID;16002844;Te1-N		

Report opened with an editor

```
1) 2011 Jan 19 01:23
2) Datlogger Type and ID
3) "Datlogger Type and ID";"16002844";"Te1-N"
4) "Datlogger Type and ID;16002844;Te1-N"
```

Example of a report

	A	B	C	D	E	F
1	18.01.2011 11:56	S1903, EC50/ameier	2-8°C non freezing products	Delivery No: 12345678	Shipping Box No: 080_2	Buenos Aires
2	18.01.2011 11:56	S1903, EC50/ameier	2-8°C may freeze products	Delivery No: 12345679	Shipping Box No: 120_6	New York
3	18.01.2011 11:57	S1903, EC50/ameier	15-25°C products	Delivery N: 12345680	Shipping Box No: 140_5	Singapore

3.8.3 Create SmartStart Pack & Go

Menu bar - Pack & Go

This is a function to set up an executable file of LIBERO SmartStart including all required settings and configuration profiles.

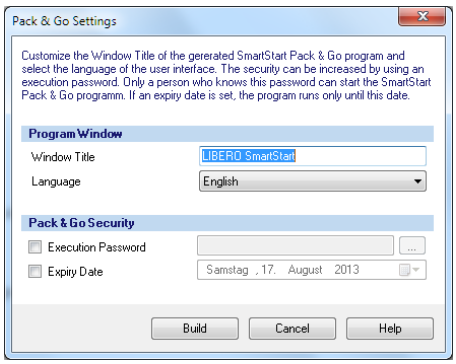
This file permits the configuration of a LIBERO Cx with a given profile, without any additional programs and without installation.

File format (.exe)

Pack & Go runs:

- on any PC
- from a WEB, FTP or file server
- or from the Internet

3.8.3.1 SmartStart Pack & Go Settings


Pack & Go Settings
Customize the Window Title of the gererated SmartStart Pack & Go program and select the language of the user interface. The security can be increased by using an execution password. Only a person who knows this password can start the SmartStart Pack & Go programm. If an expiry date is set, the program runs only until this date.
Program Window
Window Title
LIBERO SmartStart
Language
English
Pack & Go Security
Execution Password
Expiry Date
Samstag , 17. August 2013
Build
Cancel
Help

Settings

Program Window

- Window Title
  Window title bar of the executable (.exe) file. This title can provide information such as: Service provider, location or version.
- Language
  - English
  - German
  - French
  - Italian
  - Spanish
  - Dutch

Pack & Go Security

- Start Password - only authorized staff is permitted to run SmartStart Pack & Go.
- Expiry Date - the program is going to run until this date only.

Workflow of Pack & Go

1. Define profiles and LIBERO SmartStart settings.
   ⇨ 3.4 *Configuring the LIBERO Cx*
   ⇨ 3.5 *Passwords*

2. Create an (.exe) file which includes the following information:
   - Defined profiles and LIBERO SmartStart settings
   - File name and title of the window
   - Optionally: Password and expiry date

3. Send the (.exe) file to the respective department.
4. The recipient runs the (.exe) file and configures the LIBEROs.
   ⇨ 4 *Using SmartStart Pack & Go*

3.9 Help

Help

Used to search for a specific help topic.

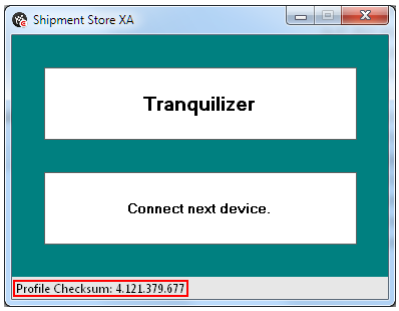
4 Using SmartStart Pack & Go

When starting the SmartStart Pack & Go (.exe) file created with liberoCONFIG, a window with predefined settings appears. The window text and the respective color code is defined in the LIBERO SmartStart settings.

⇨ 3.8 *LIBERO SmartStart settings*

Mode

The LIBERO Cx must be in Conf or Strt mode!



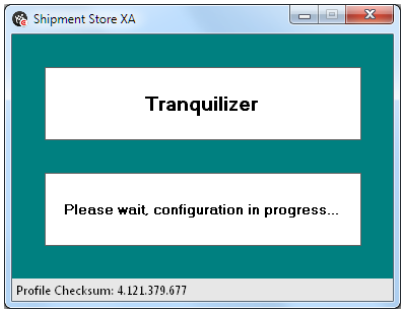
The first item from the LIBERO SmartStart list is displayed, showing the assigned color and title.

Profil-Checksum: 4.121.379.677

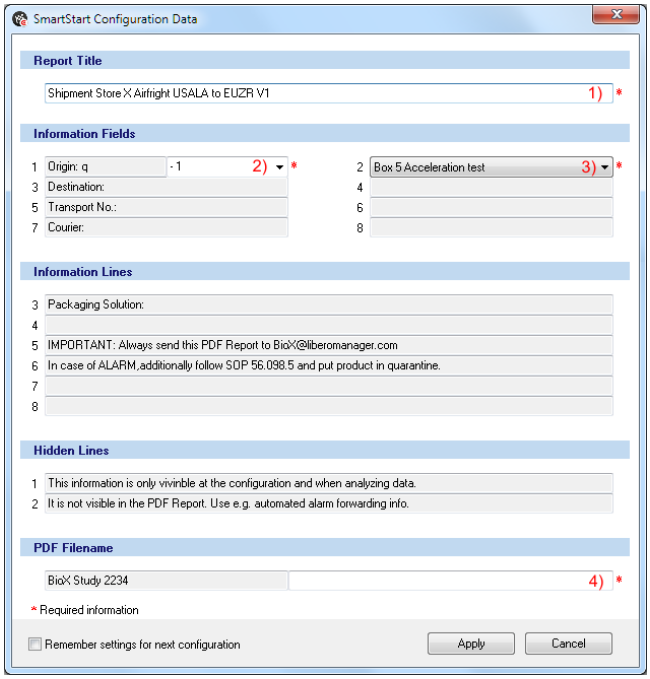
THE PROFILE CHECKSUM CORRESPONDS TO THE PROFILE CHECKSUM OF THE CONFIGURATION!

⇨ 3.3.5 *Configuration Profiles*

Now the LIBERO can be plugged into the USB port.



SmartStart Pack & Go then automatically sends the selected profile to the LIBERO.



If LIBERO SmartStart allows input of additional information, a window will open. The information can be entered via the keyboard or barcode reader.

Key to entries

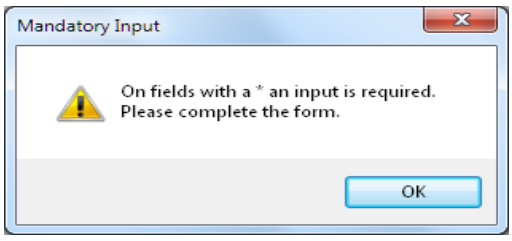
1. Edit text
2. Add dropdown
3. Insert dropdown
4. Add text

⇨ 3.8.1 *Items*

Fields highlighted in gray cannot be edited.

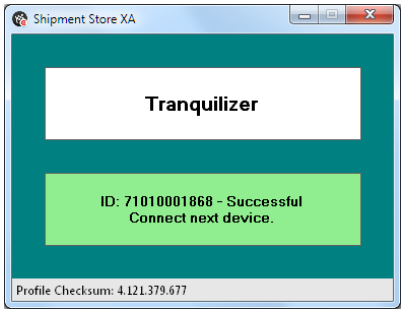
Missing variable

* Required information



Error message

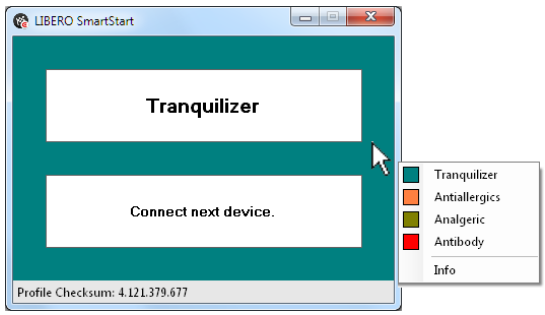
When all entries have been made, the profile settings and the variable entries are sent to the LIBERO.

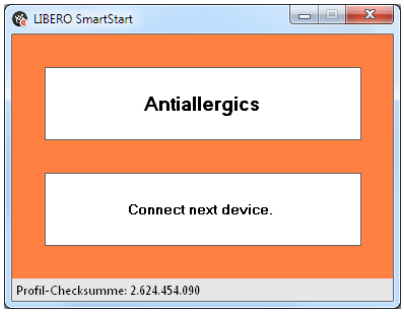


Now disconnect the LIBERO from the USB port and continue with the next LIBERO.

4.1 Change of Settings

A SmartStart Pack & Go can contain several items / profiles. Click the setting window with the right mouse button and select the right profile, for example: Antiallergics.

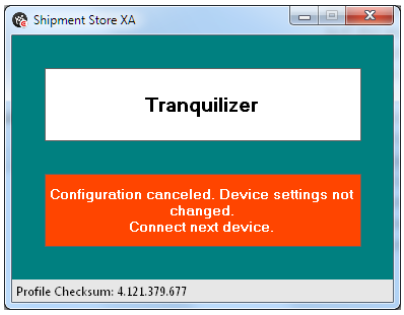




After changing the profile you can proceed with the next LIBERO.

4.2 Error Messages

In case of an error, a message will be displayed.



Reasons for error massages:

- Profile incompatible
- "Cancel" selected during data download
- LIBERO has been disconnected during configuration.

5 Miscellaneous

5.1 Software license

Registration

The software liberoCONFIG is available for downloading from the website www.elpro.com. The license key required for licensing is sent to you free of charge e-mail.

License

Dear customer,

Thank you for having chosen an ELPRO product.

Please find below the link to the setup program for liberoCONFIG as well as a personal serial number that is required during installation. Click the link and the installation will start automatically. Please be aware that the download link works just twice. In case it is not valid anymore, please register again.

Yours sincerely,
ELPRO-BUCHS AG

Download link:
http://www.elpro.com/en/support-center/software-downloads/software-downloads/at/download/dc/577cf2970b04a91fe9a28b63da10f1bb51d2a3087ce0a/

License information:
==========
User name: Gubler Andreas
Company name: ELPRO-BUCHS AG
Serial number: 0000-0000-0000
==========

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This license information is sent in the email:

==========

User name: xxxxxx xxxxxx

Company name: zzzzzz

serial number: yyyy-yyyy-yyyy

==========

Download

The download link is also contained in the e-mail. The software can be downloaded up to twice with the supplied link. Re-registration is necessary afterwards.

5.2 ELPRO Customer Service Information

If you need any assistance from the ELPRO Customer Center, please make sure you can provide the following information:

- Software version; Select "Info" in the menu option "Application"
- Used LIBERO type
- PDF report of the LIBERO
- Which actions were carried out before the problem arose (exact description of the LIBERO handlimg: time, temperature, shock etc.)
- Specification of the error, error codes

5.3 Revision History

Author	Date	Version	Description
AG	16/08/2013	-	first edition

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Operation Manual

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LI6003E 08.2013